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M. D. Matocq  
1998-2001

General Index

Catalogue #191-764  
incl. catalog of Amy E. Jess #1-34

Journal

1998-2001    Calif: San Bernardino, Los  
Angeles, Riverside, San Diego,  
Ventura, San Luis Obispo,  
Santa Barbara, Kern, Inyo,  
Fresno, Calaveras, Placer,  
Tehama, Mendocino, Humboldt,  
Siskiyou, San Benito, Colusa Cos.



M. D. Matocq  
1998-2001

Catalogue

M.D. Matocq #191-764

Amy E. Jess #1-34

Note: number sequences missing in MDM's catalog  
were assigned to live animals for which ear punch was  
taken prior to release.

Write something to  
make it clear that  
number sequences missing  
in NDM's catalog were  
assigned to live animals  
~~that~~ for which ~~car~~ <sup>enough</sup> sand  
was taken prior to release -  
(<sup>There are no</sup> missing pages)  
they do not go on <sup>the</sup> same page  
& her notebook

M.D. Matocq

1998

## Catalog

5 April

Cottonwood Basin, Granite Mts, San Bernardino Co.

191 juv ♀ N. fuscipes <sup>trap death</sup> skin, skull, tissue 300-160-31-30 = 80g

9 April

212 ♂ N. lepida <sup>trap death</sup> skin, skull, tissue 285-135-28-29 = 105g

10 April

213 ♂ Tamias <sup>trap death</sup> skin, skull, tissue 210-82-30-18 = 47g

12 April

Cushenberry Canyon <sup>8 mi. E of</sup>  
Big Bear Lake <sup>Big Bear City</sup> on Hwy 18 San Bernardino Co.

216 nullip ♀ Neotoma fuscipes <sup>tissue</sup> skin, skull 330-175-32-31 = 140g

217 scrotal ♂ " " " 355-180-34-34 = 180g

218 parous ♀ " " " 340-170-35-33 = 155g



1998

M. D. Matocq

Catalog

27 May

Dark Canyon  
San Jacinto Mtns. - 5000 ft

Riverside Co.

229	♀ juv.	<u>N.</u>	tissue	125g
230	♂	<u>N.</u> t = 17 mm	tissue skin, skull	255g.
231	♂	scars SR 1L	liver	$355 - 180 - 34 - 26 = 180$ g
232	♀	2emb.	skull, skel liv. tissue	$360 - 180 - 34 - 33 = 200$ g
233	♀		skull, skel liver	$380 - 197 - 35 - 30 = 205$ g

28 May

6 miles West of Lake on SR 74  
Big Campground, Elsinore Mtns. elev. 2600 ft.

Riverside Co.

234	♂ juv.		tissue	210g
235	♂ juv.		tissue	165g
236	♂ juv.		tissue	145g
237	♀ scars 2L 2R	2emb 40mm	skin, skull liver	$365 - 190 - 35 - 30 = 235$ g
238	♀		skull, skel. liver.	—
239	♂	t = 14 x 8 mm	skull, skel. liver	$345 - 175 - 33 - 33 = 185$ g

Tijunga Canyon 30 May

San Gabriel Mtns. 19 miles NE of La Canada Flintridge  
on Rd N 3 Angeles Crest

Los Angeles Co.

240	♂ juv.		tissue	125g
241	Dipodomys		tissue	
242	♂ adult <u>N.</u>		tissue	$X - 135 - 32 - 25 = 115$ g.



Matocq, M.D.  
1998

31 May

end Sundown Rd. off Rancho Rd.  
Santa Monica Mtns

Ventura Co.

243	♀	<u>D. fuscipes</u>	tissue	X-190-37-27 = 250g.
244	♂	juv.	tissue	= 140g.
245	♀	"	tissue	= 145g.
246	♀	"	tissue	X-205-36-28 = 245g.
247	♂	"	tissue	X-220-38-30 = 265g.
248	♂	"	tissue	X-190-36-31 <sup>cut</sup> = 310g
249	♀	"	tissue	X-190-33-30 = 220g
250	♀	"	tissue	X-200-38-30 = 245g
251	♂	"	tissue	X-195-37-30 <sup>cut</sup> = 265g
252	♀	"	tissue	X-195-33-31 = 225g
253	♀	double with 254 - juv.	tissue	= 165g
254	♀	double with 253	tissue	X-195-34-30 = 210g
255	♀	"	tissue	X-200-34-30 = 270g.
256	♀	"	tissue	X-187-34-24 = 195g.
257	♂	"	tissue	X-200-38-32 = 240g.
258	♀	scars 3L 1R	skull	
259	♀	sc. 1L 1R	tissue	395-195-35-32 = 205g.
260	♂	t = 17 x 11 mm	skull, skin	380-185-35-32 = 240g.
		"	tissue	380-170-39-34 <sup>cut</sup> = 290g.

Hastings Reservation

261 tissue only  
262 tissue only  
263 "  
264 "

Monterey Co.



Matocq, H.D.  
1998

Blackberry Trail near <sup>6</sup> Wittenberg Creek  
Lopez Lake  
Juv.

San Luis Obispo Co.

265	♂	<i>D. Fuscipes</i>	tissue	= 115g
266	♂	" "	tissue	$x - 205 - 38 - 31 = 280g$
267	♀	" "	tissue	$x - 215 - 36 - 31 = 235g$
268	♀	" "	tissue	$x - 200 - 34 - 31 = 205g$
269	♀	" "	tissue	$x - 115 - 37 - 27 = 220g$
270	♂	" "	tissue	$x - 160 - 36 - 29 = 225g$
271	♀	" "	skull, skel. tissue	<del>360</del> - 190 - 36 - 29 = 180g.
272	♀	" "	skull, skel. tissue	<del>390</del> - 195 - 36 - 33 = 240g
273	♂	" "	skull, skin tissue	<del>405</del> - 205 - 37 - 33 = 300g



Matocq, H.D.  
1998

7 June

near East end of Lake  
18 mi NW of Santa Barb. on SR 154  
Lake Cachuma

274 ♂ *N. fuscipes* juv.-subadult 6x3 Testis skull, skeletal, tissue  
adult 17x9 Testis skull, skin tissue

Santa Barbara Co.

$$325 - 170 - 37 - 27 = 105 \text{ gr.}$$

$$395 - 200 - 35 - 32 = 205 \text{ gr.}$$

8 June

Cuddy Valley

1.0 mile up 91021 from Cuddy Valley Rd.

Kern. Co.

276 ♀ *N. lepida*? ear tissue tail - 170 - 34 - 33 = 102 gr.  
♂ <sup>or 14 new scars</sup> <sub>fact.</sub> adult skin, skull 375 190 <sup>33</sup>  
277 ♀ ear/liver tissue ~~tail - 185 - 36 - 32~~ = 195 gr.  
adult ear tissue  
278 ♂ <sup>Testis = 7x11 mm</sup> skin, skull tail - ~~205~~ - 170 - 35 - 32 = 205 gr.  
279 ♂ skin tissue 385 - 205 - 37 - 33 = 180 gr.

Frazier Park

1.3 mile NE on Forest Service Rd <.25 mile up San Carlos Trail Kern Co.  
1800s - adult

280 ♂ *N.* ear tissue tail - 192 - 34 - 31 = 200 gr.  
3 emb 33 mm skin, skull, 370 - 187 - 34 - 31 = 215 gr.  
281 ♀ " tissue skin, skull, 398 - 195 - 36 - 32 = 195 gr.  
1R 1L scar + 1R emb 11 mm tissue  
282 ♀ " skin, skull, 395 - 195 - 36 - 32 = 220 gr.  
18x11 mm testis tissue

9 June

2 mi towards Teh. mtn. Park from Highline Rd  
on Water Canyon Rd  
Tehachapi Mtns - Water Canyon

Kern Co.

284 ♀ *N.* skull, skin 380 - 195 - 37 - 30 = 215 gr.  
1L 1R scar tissue  
285 ♀ *N.* skull, skin 385 - 205 - 36 - 30 = 185 gr.  
tissue

10+11 June

Mastings Reservation

Monterey Co.

286 juv. tissue only 45g  
287 juv. " 52g



1998

M.D. Makog

Catalog

24 June

3.0 mi <sup>SW</sup> of SR 155 - 8 miles east of Oleneville  
Alder Creek, Greenhorn mtns.297 ♂ N.  $t = 18 \times 11 \text{ mm}$ tissue, skull,  
& skinKern, Co.  
380 - 195 - 37 - 32 = 210g.298 ♂ N.  $t = 16 \times 10 \text{ mm}$ tissue, skull,  
skeletontail cut  
345 - 150 - 36 - 31 = 210g.299 ♂ N.  $t = 21 \times 12 \text{ mm}$ tissue, skull,  
skin, skeletontail cut  
365 - 155 - 39 - 35 = 300g

Lone Pine Creek 25 June

3.0 miles west of Lone Pine on Whitney Portal Rd.

X Lone Pine

Inyo Co.

300 ♀ N. <sup>nullip.</sup>

tissue

X - 185 - 36 - 26 = 185g

301 ♀ N. <sup>juv.</sup>

tissue

X - 135 - 33 - 25 = 95g

302 ♀ N. <sup>juv.</sup>

tissue

X - 155 - 35 - 27 = 110g

303 ♂ N. <sup>subadult</sup>

tissue

X - 185 - 36 - 30 = 205g

304 ♀ N. <sup>subadult</sup>

tissue

X - 203 - 34 - 28 = 165g

305 ♀ N. <sup>lact.</sup>

tissue

X - 200 - 33 - 27 = 185g

306 ♂ N. <sup>subadult</sup>

tissue

X - 185 - 36 - 29 = 165g.

307 ♀ N.

tissue

X - 185 - 37 - 30 = 175g.

308 ♀ N.

tissue

X - 200 - 36 - 33 = 245g.

309 ♀ N.

skel, skull,

425 - 217 - 38 - 33 = 230g.

310 ♂ N.  $t = 17 \times 11 \text{ mm}$ 

tissue

420 - 205 - 37 - 34 = 275g.

Lone Pine Creek  
Lone Pine311 ♀ N.

tissue

X - 205 - 33 - 31 = 200g.

312 ♀ N. <sup>2 cm b.</sup>

tissue, skull

405 - 210 - 35 - 30 = 245g.

313 ♂ N.  $t = 18 \times 12 \text{ mm}$ 

skel.

420 - 210 - 36 - 33 = 265g.

27 June

Sierra Natl. Forest 5 mi. E of Prather  
Big Sandy Bluff314 ♀ N. <sup>3 scars R</sup>tissue, skull  
skin

Fresno Co.

375 - 190 - 35 - 32 = 200g



Catalog

Angels Creek 22 July  
 1/2 mile E. on Utica Powerhouse Rd.  
 Murphys 1/2 mile E. of Murphys  
 nullip.  
 351 ♀ N. fuscipes tissue, skin  
 skull

Calaveras Co.

310-155-34-28 = 110g.

21 July  
 Volcano Canyon 1/2 mile E. on Mich Bluff Rd  
 Michigan Bluff from Foresthill Rd  
 Placer Co.

352 ♂ <u>N. fuscipes</u> testis 18 x 11 mm scars, 2 emb 1 ft. - zincine	tissue, skull, skel.	380-187-37-31 = 245g.
353 ♀ " "	tissue, skull, skin	360-175-36-31 = 180gr.
354 ♀ " "	tissue, skull, skel.	305-150-35-25 = 105g.
355 ♀ " "	tissue, skull, skel.	380-195-37-32 = 95gr.
356 ♀ " "	tissue, skull, skel.	367-185-37-29 = 202gr.

23 July  
 Antelope Creek - intr. set. Antl. Creek + Ponderosa Way Tehama Co.  
 357 1/2 8.5 miles on Ponderosa Way  
 scars 26, 18  
 357 ♀ N. fuscipes tissue, skull,  
 skin  
 testis 17 x 11 mm

358 ♂ " tissue, skull,  
 skel.

359 ♀ " tissue, skull  
 scars 26, 18

360 ♀ " tissue, skull  
 skull

375-197-35-31 = 180gr.

370-180-35-32 = 215gr.

390-180-34-28 = 145gr.

350-185-37-28 = 152gr.



1998

M.D. Matalaq

Catalog12 AugustPepperwood Reserve, Horse HillSonoma Co.

368	♂ <u>N. fuscipes</u> subadult $t = 9 \times 5 \text{ mm}$	skin, skull tissue	$360 - 190 - 37 - 29 = 180 \text{ g}$
369	♂ " "	skull, skel tissue	$355 - 185 - 37 - 29 = 155 \text{ g}$

Redtail Campground. 5.6 miles N of Hwy 20 Jackson State For.13 AugustMendocino Co.

370	♀ <u>N. fuscipes</u> 3 scars L: 1R; lact.	skin, skull tissue	$410 - 215 - 39 - 33 = 230 \text{ g}$
371	♀ " "	skin, skull, tissue	$395 - 200 - 38 - 32 = 180 \text{ g}$

15 AugustSix Rivers Natl. For.Hoopa ValleyHumboldt Co.

372	♀ <u>N. fuscipes</u> 2 embry.	skin, skull, tissue	$365 - 195 - 37 - 29 = 200 \text{ g}$
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17 AugustSeiad ValleySiskiyou Co.

373	♂ <u>N. fuscipes</u> nullip - juv.	skin, skull, tissue	$410 - 210 - 38 - 32 = 265 \text{ g}$
374	♀ " "	skel, skull, tissue	$360 - 200 - 38 - 28 = 145 \text{ g}$

18 AugustCedarglen Mtn. - between bothSiskiyou Co.

1A	375	♀ <u>N. fuscipes</u> scars R 3L - lact.	skin, skull, tissue	$425 - 215 - 39 - 34 = 260 \text{ gr}$
1A	376	♂ <u>N. fuscipes</u> subadult	skel, skull, tissue	$415 - 210 - 40 - 31 = 215 \text{ gr}$
1B	377	♂ " "	tissue	$270 - 140 - 34 - 27 = 70 \text{ gr}$
2A	378	♀ " "	skel, skull, tissue	$405 - 205 - 36 - 30 = 215 \text{ gr}$
2A	379	♀ " "	tissue	$410 - 197 - 37 - 31 = 225 \text{ gr}$
2B	380	♂ <u>N. fuscipes</u> adult	skel, skull, tissue	$350 - 135 - 41 - 34 = 320 \text{ gr}$
2B	381	♂ <u>N. fuscipes</u> juv. - subadult	tissue	$395 - 205 - 38 - 31 = 225 \text{ gr}$



Matocq, M.D.  
1998

18 August cont'

Area  
Cedar Mt. +  
Mt. Hebron, cont'd

3	382	♂ Juv.	<u>N. fuscipes</u>	$t = 12 \times 6 \text{ mm}$	skin, skull, tissue	415 - 210 - 38 - 32 = 255gr.
3	383	♀ lact.	" "		tissue	335 - 175 - 37 - 28 = 132gr
3	384	♀ Juv.	" "		tissue	375 - 197 - 37 - 29 = 225gr
3	385	♂ Juv.	" "		tissue	390 - 200 - 39 - 29 = 190gr.

19 August

5.7 miles east of Likely on  
Likely Jess Valley Rd.  
post-repr.

Modoc Co.

386	♀	<u>N. fuscipes</u>		tissue	360 - 200 - 36 - 30 = 190gr
387	♂	" "		tissue	X - 195 - 39 - 29 = 160gr
388	♀ post repr.	" "	3L 1R scars	tissue	X - 220 - 39 - 32 = 250gr.
389	♀ adult	" "		skel, skull, tissue	415 - 215 - 38 - 32 = 235gr.
390	♂ lact.	" "		tissue	325 - 130 - 37 - 31 = 275gr.
391	♀ 15x9mm	" "		tissue	355 - 170 - 37 - 32 = 265gr.
392	♂ t = 12x7mm	" "		skel, skull	410 - 215 - 39 - 34 = 315gr
393	♂ Juv.	" "		tissue	413 - 220 - 40 - 35 = 305gr.
394	♀ adult	" "		tissue	X - 205 - 36 - 29 = 175gr
395	♂ Juv.	" "		tissue	X - 230 - 39 - 32 = 275gr.
396	♂ Juv.	" "		tissue	X - 200 - 39 - 30 = 175gr

5.4 miles south of Likely on 395

397	♂ lact	" "		tissue	X - 210 - 40 - 27 = 210gr
398	♀ Juv.	" "		tissue	X - 220 - 38 - 32 = 270gr
399	♀ Juv.	" "		tissue	X - 195 - 38 - 31 = 150gr
400	♂ adult t = 14x8mm	" "		tissue	X - 200 - 37 - 28 = 175gr
401	♂ subadult	" "		skin, skull tissue	395 - 205 - 40 - 33 = 290gr
402	♂ subadult	" "		tissue	X - 220 - 38 - 31 = 225gr



1998

M.D. Matocq

Catalog

21 August

#	Pit River Campground, 5 mi. S.E. of Fall River Mills	Shasta Co.
403	♂ <i>N. fuscipes</i> 13x7mm	skin, skull tissue
404	♂ " "	skel, skull tissue
405	♀ " " post-repr.	tissue
406	♀ " " lact. scars 12 DR	skin, skull tissue
407	♀ " " lact.	tissue
408	♀ " " adult	tissue
409	♂ " "	tissue
410	♀ " "	tissue
411	♀ " "	tissue
412	subadult ♀ " "	tissue

22 August

4 miles ~~west~~ of Platina  
on 36

Platina

scars DR 12

Shasta Co.

413	♀ <i>N. fuscipes</i> juv.	skin, skull, tissue	395-200-39-31=225gr.
414	♀ " "	tissue	390-180-36-37=130gr.
415	adult 13x7mm	skel, skull phallus, tissue	400-190- <sup>cut</sup> -38-31=250gr.
416	♂ " "	tissue	x-180-35-25=140gr.
417	15x10mm	skin, skull	385-190-37-32=250gr.
418	♂ " "	tissue	x-170-35-26=155gr.
419	post-repr. ♀ " "	tissue	x-220-36-31=222gr.

23 August

9.5 mi. West of Stonyford off Hoyts Springs Rd.

Stonyford South Fork of Stony Creek

Colusa Co.

420	♂ <i>N. fuscipes</i>	t=20x12mm skin, skull tissue	390-175-38-27=250gr.
421	♂	t=10x15mm nullip. skull, skel. tissue	390-180-35-30=250gr.
422	♀	nullip. skull, skel. tissue	345-175-34-26=140gr.
423	♀	nullip. skull, skel. tissue	350-180-34-28=130gr.



Matocq, M.D.  
(1998)

R. Fargo collector  
Pine Flat

Fresno Co.

424 ♀ N. fuscipes Ear tag 109 1 scar-L trap death skull, skele  
trap death tissue w/o 1 hind leg  
 $365 - 180 - 33 - 26 = 180$  gr  
no head from ear on

425 ♂ " " trap death skull (partial) X  $- 150 - 33 - 25 = 100$  gr

R. Fargo collector

San Joaquin Exp. Range

Madera Co.

426 ♀ N. fuscipes juv. skull, skele  
tissue  $295 - 155 - 34 - 28 = 110$  gr

427 ♀ " gotten by dogs skull, skele  
" " tissue  $= 155$  gr  
" " could not measure

428 ♀ " " " skull, skele  
tissue  $360 - 180 - 34 - 30 = 165$  gr

Hastings Reserve

Monterey Co.

429 ♂ N. fuscipes dead (skull), tissue  $400 - 200 - 37 - 32 = 230$  gr  
in trap fluid

M. Stromberg collector

23 October 1998

Hastings Reserve

Monterey Co.

430 ♂ N. fuscipes DOR - the Lane - adult skull, tissue  
fluid  $405 - 200 - 39 - 30 = 245$  gr

431 ♂ N. fuscipes DOR - the Lane - juv. trauma skull, tissue  
to head fluid mouthful of chewed grass  
 $295 - 145 - 32 - 30 = 110$  gr

N. Johnson collector

10 January 1999

Orinda

7 Evans Place

1000 ft. elev.

Contra Costa Co.

432 ♂ N. fuscipes skull, tissue  
fluid  $470 - 230 - 42 - 32 = 370$  gr

SW corner 1.9 mi. in from Union Rd.

San Joaquin Reserve 24 February 1999 -

+ 7 miles off

San Benito Co.

433 ♀ N. fuscipes skull, skele  
ET 5497 T: 20 x 15 mm skin, tissue  $395 - 205 - 40 - 32 = 205$  gr

434 ♂ " " " "  $415 - 205 - 40 - 32 = 350$  gr

435 ♀ " " " "  $395 - 195 - 40 - 32 = 230$  gr



1999

Mato cq

Catalog

Along "The Lane" -  $\approx$  1/2 way btwn  
buildings + houses.  
Hastings Reserve

Monterey Co.March

542	♀ <u>U. fuscipes</u>	ET 240 testis = 20 x 13 mm	ET 257	skin, skull, skel., tissue	398-197-36-33 = 210gr.
543	♂ " "	"	"	"	414-199-38-32 = 245gr.
544	♂ " "	testis = 19 x 14 mm	ET 274	"	388-179-39-33 = 230gr
545	♂ " "	testis = 18 x 11 mm	ET 224	"	412-197-39-34 = 240gr.
546	♂ " "	testis = 21 x 13 mm	ET 1814	"	420-196-37-32 = 225gr.
547	♂ " "	"	"	"	403-195-38-32 = 250gr.
548	♀ " "	testis = 19 x 12 mm	ET 233	"	312-139-37-30 = 170gr.
549	♂ " "	"	"	"	322-100-39-32 = 242gr
550		testis = 21 x 14 mm			
551	♂ " "	testis = 21 x 12	"	"	420-203-39-32 = 280gr
552	♂ " "	testis = 18 x 12	"	"	262-64(s)-38-31 = 272gr
553	♂ " "	"	"	"	416-206-38-31 = 222gr.



Matocq  
1999

## Catalog

14 August

### Corral Hollow Ecol. Reserve

San Joaquin Co.

656 ♂ *Nectoma fuscipes* Rtestis = skin, skull, skel., tissue, phallus 435-210-40-32:355

### San Diego

San Diego Co.  
no wt. in ethanol

657 ♂ *N. fuscipes* scrotal SD#1 ENF0955 Mt. Laguna skull, tissue phallus 345-165-33-30

658 ♂ *N. fuscipes* scrotal SD#2 RNF0956 T.P. III skull, tissue phallus 380-180-34-30

659 ♂ *N. lepida* scrotal SD#3 Wildamar Area skull, tissue phallus 335-165-31-28

08 May

revision Quad. T9S, R7E, sec. 23?; L. Hamilton collector

### Tile Canyon

Merced Co.

660 ♀ *N. fuscipes* juv. prolapsed intestine skel., tissue skin, skull 285-150-34-30 = 90g.

R.B. Forbes collector

E.E. Wilson Wildl. Area Co. September

Benton Co., Oregon

661 ♂ *N. fuscipes* Oregon #1 testis = 20x12 phallus skel., tissue skin, skull 415-210-39-33 = 295g.

21 February

C. Cicero collector

1904 Ascot Dr., Moraga skel., tissue skin, skull

Contra Costa Co.  
~~Matocq~~

662 ♀ *N. fuscipes* "casey" caught 3/16/97 kept. captive 430-235-39-33 = 210g

24 February, 2000

R. Jones collector; 15 Aug 1998

2930 Redwood Rd.

Napa Co.

663 ♂ *Nectoma fuscipes* non-scr. phallus skull, tissue 395-210-39-27-235

scrotal t = 10x19 mm

664 ♂ " " " " 415-210-39-30 = 275g

lact. 25 cars L

665 ♀ " " " skull, tissue 410-200-37-29 = 255g



2000

M.D. Matzog

CatalogSanta Lucia PreserveMonterey Co.

19 December

660	♀ <i>Neotoma fuscipes</i> 18x15 mm testis	skin, skull skel. tissue	390-195-38-29 = 230g
667	♂ " "	" + phallus	405-200-37-31 = 220
668	♂ " " 2emb test. rt.	" + phallus	425-215-40-30 = 290 hill
669	♀ " "	"	one toe short 37g 400-200-38-30 = 240
670	♀ " " 2scars lft.	"	420-215-40-30 = 245g hill 30 or
671	♀ " "	"	400-200-37-31 = 215g
672	♀ " "	"	405-195-36-30 = 200g

20 December

673	t=20x12 yellow spotty liver ♂ <i>Neotoma fuscipes</i> t=22x11 tumor?	skin, skull + phallus skel. tissue	downhill 4. 270g 420-210-39-29 =
674	♂ " "	"	downhill 4. old tail 81g 395-180-40-30 =
675	♂ " "	"	downhill 4. 405-210-38-29 = 260
676	♂ " "	skull, tissue phallus	downhill 4. 425-215-38-32 = 305
677	♂ " "	"	downhill 4. 395-195-37-30 = 225
678	lemb L; lemb R ♀ " "	skull, tissue	downhill 4. 415-210-37-31 = 210
679	juv ♀ " "	"	downhill 4. 335-170-37-28 = 130
680	lact. ♀ " "	"	downhill 4. 415-210-36-30 = 255
681	nullip. spotted liver ♀ " "	"	uphill 380-190-38-30 = 200
682	nullip. ♀ " "	"	uphill 425-215-37-31 = 250
683	t=18x12 ♂ " "	" + phallus	uphill 405-200-37-31 = 260
684	lemb rt.; 1 scar lft. ♀ " "	spotted liver skull, tissue	uphill 415-195-38-32 = 260
685	t: 11x19 ♂ " "	" + phallus	440-220-40-33 = 285



Matocq, M.D.  
2000

2.5 miles on ~~San~~ Rancho San Carlos Rd. For intsc, w/ C.V. Road  
Santa Lucia Preserve Monterey Co.

21 December

686	♂	$t = 19 \times 13 \text{ mm}$	Neotoma fuscipes	skull, tissue phallus	3rd area (meadow)	329
687	♂	$t = 11 \times 19$	"	"	uphill	405 - 200 - 39 - 32 = 320
688	♀	2 scars rt.	"	+ tissue, skull	dounhill	420 - 215 - 38 - 30 = 265
689	♀	"	"	"	dounhill	385 - 185 - 39 - 31 = 215
690	♂	$t = 16 \times 10 \text{ mm}$	"	tissue, skull, phallus	uphill	410 - 205 - 39 - 32 = 275
691	♀	nullip " botfly	"	skull, tissue	uphill	290 - 85 - 38 - 28 = 240
692	♂	$t = 19 \times 10$ botfly	underside of tail whiter	skull, tissue phallus	dounhill	400 - 190 - 38 - 33 = 310
693	♀	2 cm b 1 ft. horn	"	skull, tissue	uphill	410 - 210 - 39 - 31 = 325
694	♂	$18 \times 13 \text{ mm}$	"	phallus	uphill	385 - 190 - 36 - 29 = 275
695	♀	"	"	skull, tissue	uphill	390 - 195 - 37 - 34 = 180
696	♀	2 cm b.	underside of tail whiter	"	dounhill	410 - 205 - 38 - 30 = 230
697	♂	Neotoma fuscipes	skull, tissue	405 - 205 - x - 26 = 215	2000	

San Clemente Watershed near Robinson Cnyn Road + end of SLP prep  
Santa Lucia Preserve coll. March 21, Monterey Co.



2000

K.L.D. Matog

Arroyo Seco CampgroundManteca Co.

Dec. 29

705	♂	$t = 11 \times 7 \text{ mm}$	Neotoma fuscipes	skin, skull, skel, tissue, phallus	380 - 200 - 36 - 31 = 90	(2)
706	♂	$t = 18 \times 9 \text{ mm}$	"	"	385 - 200 - 37 - 30 = 220g	(4)
707	♂	$t = 19 \times 12 \text{ mm}$	phallus adhered to scrotum	"	385 - 195 - 35 - 29 = 205g	(2)
708	♀	"	"	skull, tissue	partly eaten - no limbs	(2)
709	♂	$t = 17 \times 10 \text{ mm}$	cancer? under skin	skin, skull, skel, tissue, phallus	$x = 195 - x - 30 = 215g$	(2)
710	♀	juv-subadult + pelage	"	skull, tissue	405 - 205 - 39 - 32 = 275	(1)
711	♀	"	"	fluid	325 - 175 - 36 - 30 = 140g	(1)
712	♀	"	"	skin, skull, skel, tissue	390 - 200 - 38 - 31 = 240g	(1)
713	♂	juv	"	skull, tissue	390 - 210 - 36 - 30 = 210g	(1)
		♂	"	fluid	335 - 175 - 35 - 30 = 135g	

Dec. 30

714	♀	emb.	Neotoma fuscipes	skin, skull, skel, tissue	365 - 180 - 36 - 30 = 120g	(2)
715	♀	"	"	"	370 - 185 - 32 - 29 = 195g	(2)
716	♀	emb. rt. - 45mm	"	"	385 - 195 - 34 - 32 = 210g	(3)
717	♀	scars 2R 1L	"	"	400 - 210 - 36 - 31 = 205g	(5)
718	♂	"	"	skull, tissue	400 - 195 - 36 - 33 = 295g	(2)
719	♂	$t = 15 \times 8 \text{ mm}$	"	skull, skel, phallus, tissue	375 - 190 - 36 - 30 = 190g	(2)
720	♂	$t = 14 \times 8 \text{ mm}$	"	"	360 - 185 - 38 - 30 = 180g	(2)
721	♀	juv	"	skull, skel, tissue	310 - 160 - 35 - 29 = 120g	(2)
722	♂	"	"	skull, fluid	410 - 200 - 38 - 32 = 280g	(5)
723	♂	"	"	phallus, tissue	425 - 215 - 38 - 30 = 295g	(5)
724	♂	"	"	"	385 - 205 - 34 - 29 = 205g	(5)
725	♀	"	"	"	400 - 215 - 35 - 31 = 205g	(5)
726	♂	"	"	"	395 - 185 - 38 - 32 = 255g	(5)
727	♂	$t = 13 \times 8 \text{ mm}$	"	skull, skel, phallus, tissue	385 - 185 - 37 - 32 = 245g	(5)



2000-2001  
M. D. Wakay

Dec. 30 cont'd

728	♂	$t = 17 \times 9 \text{ mm}$	<i>Neotoma fuscipes</i>	skull, skel. phallus, tissue	⑤	205g
729	♀	"	"	skull, fluid, tissue	① damaged by predator	$375 - 195 - 38 - 32 = 200 \text{ g}$
730	♂	"	"	"	①	$385 - 190 - 37 - 30 = 240 \text{ g}$
731	♀	"	"	"	⑥	$385 - 200 - 34 - 31 = 220 \text{ g}$
732	♂	$t = 18 \times 11 \text{ mm}$	"	skull, skel phallus, tissue	⑥	$395 - 195 - 36 - 32 = 225 \text{ g}$
733	♀	"	"	skull, fluid, tissue	⑤	$380 - 190 - 37 - 30 = 205 \text{ g}$
734	♀	juv.	"	skull, skel tissue	⑤	$305 - 155 - 35 - 28 = 130 \text{ g}$

12-14 Boundary  
Fort Hunter Liggett

Monterey Co.

January 04

735	♀	$t = 18 \times 11 \text{ mm}$	<i>Neotoma fuscipes</i>	skull, skel skin, tissue	③	$405 - 200 - 57 - 32 = 245 \text{ g}$
736	♂	"	"	" + phallus	①	$375 - 180 - 34 - 32 = 235 \text{ g}$
737	♂	$t = 20 \times 11 \text{ mm}$	"	"	①	$415 - 200 - 37 - 33 = 275 \text{ g}$
738	♂	$t = 16 \times 10 \text{ mm}$	"	"	④	$395 - 180 - 38 - 31 = 240 \text{ g}$
739	♂	"	"	"	④	$410 - 200 - 38 - 31 = 285 \text{ g}$
740	♂	$t = 20 \times 10$	"	"	③	$415 - 200 - 36 - 32 = 300 \text{ g}$
741	♀	2 small emb - 1 R/L	"	skull, skel skin, tissue	④	$400 - 195 - 35 - 31 = 210 \text{ g}$
742	♀	1 small emb L	"	"	④	$390 - 190 - 36 - 31 = 210 \text{ g}$
743	♀	"	"	"	④	$400 - 190 - 33 - 32 = 230 \text{ g}$
744	♀	1 scar R	"	"	③	$385 - 190 - 33 - 31 = 190 \text{ g}$
745	♀	"	"	skull, fluid tissue	②	$405 - 200 - 34 - 32 = 210 \text{ g}$
746	♀	"	"	"	②	$390 - 185 - 35 - 31 = 200 \text{ g}$
747	♀	"	"	"	①	$385 - 200 - 36 - 30 = 190 \text{ g}$
748	♀	"	"	"	④	$420 - 205 - 37 - 33 = 240 \text{ g}$



Matocq, M.D.  
2001

January 04 cont'd

749	♀	<u>Neotoma fuscipes</u>	skull, fluid tissue	①	390 - 190 - 37 - 31 = 210g
750	♂	"	" + phallus	②	380 - 190 - 36 - 31 = 242g
751	♂	"	"	②	420 - 195 - 38 - 33 = 312g
752	♂	"	"	④	415 - 205 - 37 - 30 = 300g
753	♂	"	"	③	405 - 200 - 38 - 32 = 265g
754	♂	"	"		420 - 195 - 38 - 32 = 350g
755	♂	$t = 19 \times 11$	"	skull, skele tissue + phallus	②
756	♂	$t = 19 \times 11$	"		②
757	♂	$t = 20 \times 11$	"		②
758	♂	$t = 19 \times 10$	"		①
759	♂	$t = 19 \times 10$	"		①
760	♂	$t = 20 \times 10$	"		④
761	♂	$t = 17 \times 7 \text{ mm}$	"		①
762	♀	"	"		①
763	♀	scar right	"		①
764	♀	nullip.	"		①
	♀	"	"		340 - 160 - 33 - 28 = 140g



JESS, Amy E  
1999-2000

Catalog

Robber's roost, outside Inyokern, Kern Co., California. (Captive born from wild caught parents)

22 Sept. 1999 - (killed by sibling)

1 juv. ♂ Onychomys torridus + tissue 120-40-17-13  
(liver) = 10g.

6.4 miles W off Lockwood San Lucas Rd. (from Hwy 101) between San Lucas & Lockwood, Monterey Co., California. (dense oakwoodland hillside.)

19 Nov. 1999

2 ad. ♂ Neotoma fuscipes + tissue 3100-190-32-31 = 230g  
+ skin, skull, skel, phallus

20 Nov. 1999

3 ad. ♂ Neotoma fuscipes + tissue 370-175-30-27 =  
+ skin, skull, skel, phallus -

4 ad. ♂ Neotoma fuscipes + tissue 420-210-33-25 =  
+ skin, skull, skel, phallus

~5 miles E off Lockwood San Ardo Rd. (from Lockwood San Lucas Rd. off Hwy 101) Williams Hill, BLM land, Monterey Co., California (dense oakwoodland hillside)

4 Jan. 2000

5 ad. ♀ Neotoma fuscipes + tissue 310-170-34-32 = 155g  
+ skin, skull, skel,

Deer trail on Camp Roberts ~~Mt.~~ Military base, San Luis Obispo Co., California (oak woodland hillside, rat houses w/in close proximity to each other)



Jess, Amy E.  
1999-2000

## Catalog

6 Jan 2000

6 ♂ <sup>ad.</sup> <sup>T=11x16mm</sup> Neotoma fuscipes + tissue (liver) 350-190-38-31=216g  
+ skin, skull, skel, phallus

7 ♂ <sup>ad.</sup> Neotoma fuscipes + tissue (liver) 375-190-39-34=280g  
+ skin, skull, skel., phallus

8. ♀ <sup>ad.</sup> Neotoma fuscipes + tissue (liver) 339-180-35-31=190g  
+ skin, skull, skel

9 ♀ <sup>ad.</sup> Neotoma fuscipes + tissue (liver) 346-194-35-33=220g  
+ skin, skull, skel

10 ♀ <sup>ad.</sup> Neotoma fuscipes + tissue (liver) 373-201-39-33=213g  
+ skin, skull, skel

11 ♀ <sup>ad.</sup> Neotoma fuscipes + tissue (liver) ~~3710-192-37-36=246~~ <sup>246</sup> ~~246~~ g  
+ skin, skull, skel

6.4 miles W off Lockwood San Lucas Rd. (from Hwy 101) between San Lucas & Lockwood, Monterey Co., California (dense oakwoodland hillside.)

20 Nov 1999

12 ♀ <sup>ad.</sup> Neotoma fuscipes + tissue (liver) 375-197-37-34=162g  
+ skin, skull, skel

Sherwood Forest on Camp Roberts Military base, Monterey Co., California (Riparian woodland)

6 Jan 2000

13 ♂ <sup>ad.</sup> <sup>T=13x8mm</sup> Neotoma fuscipes + tissue (liver) 414-219-41-41=380g  
+ skin, skull, skel., phallus

14 ♀ <sup>ad.</sup> Neotoma fuscipes + tissue (liver) 410-219-40-41=270g  
+ skin, skull, skel



Jess, Amy E.  
2000

## Catalog

Sherwood Forest on Camp Roberts Military base,  
Monterey Co., California (Riparian woodland)

6 Jan 2000

ad. scars 1R-2L

15 ♀ Neotoma fuscipes + tissue (liver) 416-200-40-39 = 260g  
+ skin, skull, skel

ad T = 9x14mm

16 ♂ Neotoma fuscipes + tissue (liver) 377-191-39-34 = 340g  
+ skin, skull, skel, phallus

ad T = 17x12mm

17 ♂ Neotoma fuscipes + tissue (liver) 442-210-~~43~~<sup>43</sup>-37 = 340g  
+ skin, skull, skel, phallus

~5 miles E off Lockwood San Ardo Rd. (from  
Lockwood San Lucas Rd. off Hwy 101) Williams  
Hill, BLM land, Monterey Co., California (dense  
oakwoodland hillside)

4 Jan 2000

ad

18 ♀ Neotoma fuscipes + tissue (liver) 330-180-37-31 = 190g  
+ skin, skull, skel

ad

19 ♂ Neotoma fuscipes + tissue (liver) 365-185-37-32 = 250g  
+ skin, skull, skel, phallus

Deer trail on Camp Roberts Military base,  
San Luis Obispo Co., California (oakwoodland  
hillside, woodrat houses w/in close proximity to  
each other)

6 Jan 2000

nalliparous

20 ♀ Neotoma fuscipes + tissue (liver) 350-183-40-34 = 167g  
+ skin, skull, skel<sup>(yes)</sup>

ad sc. T = 16x9mm

21 ♂ Neotoma fuscipes + tissue (liver) 415-204-42-37 = 259g  
+ skin, skull, skel, phallus



Jess, Amy E.  
1999-2000

## Catalog

Deer trail on Camp Roberts Military base, San Luis Obispo Co., California (oakwoodland hillside, woodrat houses w/in close proximity to each other)

6 Jan 2000

ad. scars 3R 0L

22 ♀ Neotoma fuscipes + tissue (liver) 404-203-42-34 = 249g  
+ skin, skull, skel

23 ♀ <sup>natrili parous</sup> Neotoma fuscipes + tissue (liver) 362-180-40-34 = 170g  
+ skin, skull, skel

~~6.4 miles Woff Lockwood San Lucas Rd. (from Hwy 101)~~  
~~between San Lucas & Lockwood, Monterey Co., California~~  
~~(dense oakwoodland hillside.)~~

22 Dec 1999

ad. scars 3R 1L

24 ♀ Neotoma fuscipes + tissue (liver) 420-220-36-30 = 196g  
+ skin, skull, skel (found w/ AEJ 25)

25 ♂ <sup>juv.</sup> Neotoma fuscipes + tissue (liver) 274-140-40-30 = 100g  
+ skin, skull, skel, phallus (found w/ AEJ 24)

~~~ 9.9 miles SE (by road) of San <sup>Miguel</sup> Marcos on~~  
~~Estrella river bed, San Luis Obispo Co., California~~  
~~(dry river bed with oakwoodland)~~ 13 Feb 2000

<sup>T=17x10mm</sup> 26 ♂ Neotoma fuscipes + tissue (liver) <sup>380</sup> ~~367~~ - 195-36-34 = 10 oz. -  
+ skin, skull, skel, phallus <sup>= 284</sup>

27 ♀ <sup>scars 3R 4L</sup> Neotoma fuscipes + tissue (liver) 380-190-39-36 = 9 oz. -  
+ skin, skull, skel <sup>= 255 g</sup>

28 ♀ <sup>no scars</sup> Neotoma fuscipes + tissue (liver) 380-200-36-38 = 8 oz.  
+ skin, skull, skel <sup>= 227</sup>

29 ♀ <sup>scars 1L 0R</sup> Neotoma fuscipes + tissue (liver) 400-210-39-38 = 250g  
+ skin, skull, skel



Jess, Amy E  
2000

## Catalog

~16.5 miles SE of San ~~Marcos~~<sup>Miguel</sup> (by road) on Estrella  
River bed, San Luis Obispo Co., California ~~XXXX~~  
(river bank, small area of usable habitat  
between water and sand field)

12 Feb 2000

30 ♂ Neotoma fuscipes + tissue  
<sup>T=16x9mm</sup>  
(liver)  
+ skin, skull, skel, phallus  $412 - 207 - 38 - 41 = 310$  g

~ 9.9 miles SE (by road) of San ~~Marcos~~<sup>Miguel</sup> on  
Estrella river bed, San Luis Obispo Co., California  
(dry river bed).

13 Feb 2000

31 ♀ Neotoma fuscipes + tissue  
<sup>no scars</sup>  
(liver)  $382 - 195 - 41 - 35 = 200$  g  
+ skin, skull, skel  
<sup>T=18x11mm</sup>

32 ♂ Neotoma fuscipes + tissue  
<sup>T=16x10mm</sup>  
(liver)  $405 - 210 - 38 - 39 = 295$  g  
+ skin, skull, skel, phallus

33 ♂ Neotoma fuscipes + tissue  
<sup>T=14x8mm</sup>  
(liver)  $410 - 210 - 41 - 40 = 265$  g  
+ skin, skull, skel, phallus

34 ♂ Neotoma fuscipes + tissue  
<sup>T=14x8mm</sup>  
(liver)  $390 - 210 - 40 - 40 = 225$  g  
+ skin, skull, skel, phallus



M. D. Matocq  
1998-2001

Journal

California: San Bernardino, Los Angeles, Riverside, San  
Diego, Ventura, San Luis Obispo, Santa  
Barbara, Kern, Inyo, Fresno, Calaveras,  
Placer, Tehama, Mendocino, Humboldt,  
Siskiyou, San Benito, Colusa Cos.



1998

M.D. Matocq

## Journal

Big Bear Lake

San Bernardino Co.

11 April

8<sup>00</sup>pm

Today was spent touring the Big Bear area. At about 4<sup>00</sup> pm we set out for the Cactus Flats area to set some traps.

We set 12 Tomahawks and 12 Shermans around houses up a hillside along Highway 18, exactly 8.0 miles outside of Big Bear City headed towards Lucerne Valley.

12 April

Westlake Village

Los Angeles Co.

2<sup>00</sup>pm

Checked traps at 6<sup>00</sup> this morning and got 2 female and 1 male N. fuscipes. Packed up and headed out of Big Bear - it snowed quite heavily last night but we made it through chain control. We followed Highway 18 to the 330 and continued heading for Los Angeles



on the 330. Once past the snow line we stopped at a Forest Service Station (City Creek) along the road, and looked for Diadophis for about an hour. We did not find any ring-necked snakes but we (actually Chris) did find a patchnose snake of the genus Salvadora and two Batrachoseps.

We then continued on to Westlake Village to have Easter lunch with Chris' family.

In the ride to Berkeley tonight we will likely encounter rain. All in all this was an excellent trip - can't wait to get out there again!



1998

U.D. Matocq

## Journal

Dark Canyon  
San Jacinto Mtns. 5,000 ft <sup>elev.</sup> Riverside Co.

26 May

This is the first of many sites that I will visit, with assistance of Chris Feldman, where I will collect specimens and DNA samples to do a phylogeographic study of *R. fuscipes*. There have been several revisions of the subspecific designations within the species, but the most recent was an extensive study by Emmet Hooper. His morphological study designated 11 subspecies and 3 major morphological groups that those 11 fall into.

My intent is to sample from about 40 localities throughout the range and both test some of the morphological divisions within the species and to describe the phylogeographic history of *fuscipes*. Their range is concordant with many Californian species such



as Ensatina so it will be interesting to compare & contrast the biogeographic patterns of these and other vertebrates.

The trapping effort will generally be to set out 40 folding Tomahawk traps baited with peanut butter and oats. I have also made 40 black, cloth bags to slide over the traps to attract the woodrats on moonlit nights and to attract fewer predators to the traps when a woodrat has been captured.

We arrived here on the West side of the San Jacinto mtns. yesterday evening and set out 30 traps. Unfortunately, the poison oak here is very far behind in ~~blooming~~<sup>leaving</sup> out and we didn't recognize it - therefore many of our traps are right in the poison oak! We trapped primarily in three



areas down this Forest Service road. The first was, as I said, in the middle of a pure stand of Toxicodendron which was flanked by some large boulders.

The second area was in a low standing oak forest with no understory - many houses here were in the low oaks. Finally, I also set traps along an overgrown road that was lined with shrubby oaks on one side and a <sup>dry</sup> grassland field on the lower side.

From this road there is a beautiful view of which is still covered in snow this year.

We trapped a total of 5 animals and as I hope to do throughout this trip, I put up one skin, and took 2 skeletons, the rest of the animals will only be sampled for ear tissue.



While preparing the specimens someone started shooting a .22 from the road above us, (hopefully) not realizing we were below them. Ahhh, the joys of camping in southern California!

We're heading out at about noon for the Lake Elsinore area.

Lake Elsinore

<sup>elev.</sup>  
2600 ft.

Riverside Co.

27 May

We arrived at El Cariso campground past dark last night. We spent most of the day washing our gear because of how much poison oak we had encountered. Not wanting to trap near a campground if we could avoid it, we continued through the Cleveland National Forest on SR 74 from Lake Elsinore. Amazingly, there are absolutely no roads or even turnouts off the 74 in this Forest. We arrived at the



campground and I thought there was no hope of working. However, on the east end of the campground there was a high concentration of low and medium stature oaks - with houses at their base. We were able to set out 10 traps near the area we camped. We trapped a total of 6 animals - pretty great trap success.

After preparing specimens, we will leave for the next site in the Lake Henshaw, Mt. Palomar area.

Mt. Palomar

<sup>elev.</sup>  
4800 ft.

San Diego, Co.

28 May

We arrived in the afternoon and began looking for areas to work. This is a high elevation site with a tall forest of oaks and Jeffrey Pine. Along a south facing slope behind Observatory campground there were several



that looked promising. We set a total of 30 traps, but came up empty handed in terms of Neotoma. The houses were of average size - about 3 ft. tall. Perhaps the winter here was particularly harsh - it's difficult to say. It would be interesting to resample this site after the summer to see if it gets colonized. Perhaps sites at high elevations experience more 'blinking' out and subsequent recolonization.

### Westlake Village

Ventura Co.

29 May  
30

After leaving Mt. Palomar we wanted to try to sample near Julian. Again, we were faced with so much private property that it was impossible to work. We continued on the 79 and 50th on S1. The public land here was all too high in elevation,



at least, wherever we stopped there were never any woodrat houses. By the time we reached the 8 we were fairly tired of traveling and not having luck finding woodrats so we decided to head North to Westlake Village where Chris' family lives. During the weekend, then, we will collect at two sites in the Santa Monica and Los Angeles areas.

Tonight we will go up to the Angeles Crest area and work in Tijunga canyon. Chris' father will come with us as well as two of Chris' friends, Jason Izakowitz and Scott Scheff.



Tijunga Canyon; 10 <sup>miles</sup> NE of intersection  
of SR2 + W3  
Angeles Crest on the W3 Los Angeles Co.

31 May Arrived at Monte Cristo campground in the evening and set 30 traps along a dirt road leaving from the North end of the campground. One trap line was in shrub oak-chaparral habitat adjacent to the road & the other line was in a willow-dominated riparian zone following the creek.

Trap success here was very low. We caught one N. lepida at a house in the riparian zone and one juvenile N. fuscipes in the chaparral.

We returned to Westlake in the late morning. In the afternoon we changed the oil in my truck, then went to set traps.

We took the Rancho Road exit off 101 and went west. We turned left (5th) on Sundown road. At the end of this street is a dirt



road that many people use as a horse riding trail. There was a creek running near the trail with some water still running. On each side of the trail in common riparian vegetation were several woodrat houses. We set traps on each side from the start of the trail to about .5 - 1 km in.

Rancho Road near Westlake Village Ventura Co.

1 June Returned to check traps and was surprised at the success. We got tissue from 18 animals. The abundance here is more reminiscent of blasting's Big Creek than anything I've seen. One female was observed swimming in the creek. She wanted to cross in an area that had no overhanging branches. She ran back and forth over the distance of about 1 meter ~~the~~ seeming to hesitate entering the water. She finally jumped in the water after



about 20-30 seconds of running along the back. Interestingly, she really only used her hind legs to propel herself, her forearms were almost just dangling at her sides, she didn't "dog paddle" as I would have expected.

Perhaps she could touch the bottom with her hind legs and wasn't actually swimming.

At any rate, this trap success ended this first trip on a high note. Now it's back to Hastings.



1998

W.D. Matacq

## Journal

10.5 miles NE of Arroyo Grande on Hwy 101. Elev. 520 ft.  
Lopez Lake Santa Lucia Mtns. San Luis Obispo.

5 June

Arrived in the area about 2<sup>00</sup> pm and looked for sites south of the Lopez Lake area. All was private property and there were no campgrounds so we went to the Lopez Lake Recreation Area. The ranger there was extremely helpful and even offered us a free campsite. We set traps in several areas north of the main campground off of Blackberry Trail. This trail was still quite muddy in places and the vegetation was dominated by coast live oak, gooseberry, blackberry and poison oak. Some traps were set in chaparral dominated by manzanita, sage, <sup>other</sup> & mints.

6 June

9<sup>00</sup> am Traps yielded 9 animals. We broke down camp and headed south on the 101.



1998

M.D. Matocq

## Journal

18 mi. NW of Santa Barbara off SR 154  
<sup>near east end</sup> Fremont Campground on Paradise Road  
Lake Cachuma Santa Ynez Mtns. Santa Barbara Co. Elevation 900 ft.

7 June

Arrived the evening of 6 June at Fremont campground and trapped in the surrounding area. The dominant vegetation was coast live oak, thistle and an incredible amount of poison oak.

I only found two Peromyscus. The area, though, would be excellent for pocket gophers - there were many in the campground. Also, we observed an interesting interaction between two hummingbirds (perhaps black-chinned). One of the pair (presumably the female) was on the ground and the other was flying in an arc back and forth in front of her.

They maintained their heads oriented to one another. The animal on the ground turned her head side to side watching the other animal go through the arc. After about 1.5 minutes they had both flown away.



After checking traps and breaking down our camp we headed southeast to the Frazier Park area.

Frazier Park San Emigdio Mtns. Kern Co.

8 June

1.3 mi. NE of Fr. Pk. off San Carlos trail.

We set traps in two areas, on San Carlos trail just NE of town and then also west of 1.0 mi <sup>up away off Cuddy Valley Rd.</sup> town. It was a cloudy night and the coldest we have spent yet. Oak trees, perhaps Q. chryssolepis and scrub oaks along with Piñon Pine are dominant. I collected several Nectamia here. Their identification is tenuous because these specimens are probably N. f. simplex, the smallest of the species with no dusky splash on the top of the hind feet. The DNA analysis will be particularly interesting here. The transverse cut across the bottom of the Central Valley connecting



the Sierra Nevada + the Coast  
Ranges makes this one of  
the most interesting biogeographic  
areas in the state. I  
prepared specimens while  
Chris collected several interesting  
lizards including two Kantusia  
and I helped with a Eumeces.  
We then left towards the  
town of Tehachapi.

9 June

<sup>Water Canyon, 2 mi N. Teh. Mtn Park</sup>  
Tehachapi <sup>on Water Canyon Rd.</sup>

Kern. Co.

We arrived and searched in  
several areas for Fuscipes  
habitat. Once out of town  
towards the south, elevation  
rises so quickly that there  
is really a narrow area  
of available habitat for  
these oak-associated  
animals. We set traps  
on a West-facing slope  
along Water Canyon Rd. This is the



June cont'd steepest terrain on which I have trapped for woodrats.

There are several houses quite evenly spaced. They appear to be unkept but some have recent signs - fairly fresh pellets. Like Mt. Palomar this high elevation area has several houses but does not seem to be currently active. Is this due to this year's harsh winter? Or is there continued "blinking" out of these marginal populations? How and when will recolonization occur? It will be interesting to visit these areas in the future.

Indeed, we only caught two females, one pregnant, the other was parous. Are these "hangers-on"? Or founders?

Back to Hastings for demographic data.



Journal

near Alder Cr. campground

Alder Creek, Greenhorn Mountains

Kern. Co.

25 June  
24

Arrived from Hastings ~~and~~ at about 5:00 p.m. <sup>25 June</sup> and set out 36 traps in 3 localities along the road leading from SR 155 to Alder Creek Campground.

The habitat where houses were found was oak dominated with some incense cedar and pine - mostly tall stands with grassy ground cover with a lot of miner's lettuce. Houses appear to have quite a bit of cob webbing - never a good sign.

Also, many free ranging cattle at this site. They have altered the site quite dramatically in places (especially in loosening the soil on some slopes).

Of the 36 traps there were only 3 Neotoma (MDM 297, 298, 299). All males, although 297+298 look very different than 299.

After preparing the specimens, we left to go to Lone Pine.



Lone Pine

Inyo Co.

25 June

Arrived at Lone Pine Campground at about 5 p.m.<sup>24 June</sup>. We drove from the Lake Isabella area by way of the 155 to the 178 then up the 395. In Lone Pine we turned West on Whitney Portal road. This road is right along Kern Creek which is absolutely raging right now since this year's snowpack has just started melting. The creek is being stocked with trout so the fisherman are out in full force. About 3 miles West of Lone Pine (395) on Whitney Portal road where the creek crosses the road, we found several nests both along the road and along the creek. The houses near the road are some of the tallest I've ever seen - a good 6 feet! Interestingly, this is the first site I've ever found that has no oaks. The houses are built mostly in



The dominant tree-shrubs in the area which is a species of Populus - the leaves are recognizably Populus but only about 1 inch x 1 inch.

There is also willow but mostly the cottonwood-like tree-shrub is what the Nectoma appear to be using.

We stayed just up the road at ~~Whitney~~ Lone Pine campground and set some more traps at a few houses near the creek. This is a beautiful spot. The contrast of the desert sage habitat and the Kern Creek riparian zone with the snow covered Sierras as a backdrop is stunning.

The trapping effort yielded 13 Nectoma. All the <sup>adult</sup> animals have the basic measurements of Rscipes - even some longer in the tail, however, some adults have very pale feet above and below. None have the common duskeness on the top



of the hind feet - characteristic  
of N. F. simplex but the paleness  
of the pads is new to me.  
It will be interesting to study  
these specimens further.

25 June  
cont'd

Badger

Tulare Co.

Left Lone Pine this morning  
and came back around the  
southern tip of the Sierra's -  
over Walker Pass again. Kern  
Co. is so interesting in  
how dry the areas are  
like around Lake Isabella  
yet the riparian corridors  
that go along the rivers -  
like the Kern are lush and  
very wide - I'm sure extremely  
important for biogeographic  
patterns. Once in Bakersfield  
we headed North on the 99  
after coming down the 178  
along the raging Kern River.  
The 178 between Lake Isabella  
and Bakersfield is in a  
narrow canyon eroded down



by the Kern over time. The canyon is deep + winding - very impressive.

The first site I tried to set up at was near Lake Kaweah outside of Three Rivers. The area was extremely dry and the quantity of private property made it impossible to work. The ranger at Lake Kaweah said he had some woodrats in his house but those are all I saw sign of. We continued on the J21 to head towards Badger. The road went through lush farmlands and the town of Badger was very quaint. We went up the 345 into Sequoia Nat'l Forest and tired out so we just pulled off + camped on a dirt road. There appears to be some <sup>woodrat</sup> houses but its too late to make a good trapping effort.



Dinkey Creek  
Shaver Lake

Fresno Co.

26 June Packed up near Badger and went up the 41 to Friant Rd. Took Friant Rd. to Millerton Lake and spoke with various rangers and resource biologists about where I might find Neotoma in the area. They were extremely helpful and gave me permission to stay in the Park - gate combinations and all. I went into the areas they suggested and although the vegetation looked good the slope was very steep and I saw no houses. We headed towards Shaver Lake on the 168 and just as we passed into Sierra Nat'l Forest we stopped at a turnoff that was in good cover. There appeared to be a good number of houses so after setting up camp near Shaver Lake on Dinkey Creek



Rd. we returned to set traps.

27 June Trap success was fairly disappointing, I only caught one female (\*34). All the houses looked active with fresh fecal pellets, but perhaps the noise of trap setting kept them away. This female is much darker in pelage than the other specimens from this trip, but still has the white dorsal surface of the hind foot characteristic of N. f. streakeri as described by Hooper.

The site of capture was dominated by Arctostaphylos, Toxicodendron, <sup>and</sup> Q<sub>uercus</sub>. The house of capture and the others were characteristic of most fuscipes houses - about 3 feet tall.

I think N. f. streakeri and the West side of the Sierra's will prove difficult



to collect. Private ag land goes so far up the slope that you're in coniferous forest by the time public lands begin.

This trip in general for the phylogeographic study of Fuscopterus has reinforced the notion that all conservation battles will be won and lost on private lands.

This evening we are back at Hastings for three nights, of trapping - hoping for some juv's.



JournalMurphysCalaveras Co.

20 July

Left Hastings yesterday morning and headed to the Sierran foothills via SR152 and 120 then North on the 49 and NE on the 4. Set only 10 trap stations at two localities just East of the town of Murphys. Difficult to find good habitat that's not behind a "No Trespassing" sign - common theme this summer.

Spent the night at Big Trees State Park. A whopping \$16 to sleep a few hours, fight off a bear, and get so many mosquito bites that we look like we have the chicken pox! Not such a great design on the bear lockers up here! Our Yogi figured things out very quickly and took off with all our Graham Crackers and chips Ahoy - smarter than the average bear. Quite incredible strength - in one fell swoop it launched our largest food bin  $\approx 4.5 \times 2$  ft a good 4 ft.



1998

M.D.Matocq

## Journal

out of the bear locker. Minus our goodies we fared quite well.

This morning our traps yielded only one young female. We were about .5 mile into Utica Powerhouse Road about .1 mile East of Murphy's on SR4. Utica Road follows a stream and this particular house and others were on the opposite side of the road from the stream. The house was in a *Quercus chrysolepis* at the base. Other dominant flora were Big Leaf Maple, *Pinus*, and a fair amount of herbaceous ground cover. Today we head North on the 49 for the Michigan Bluff area.



1998

M.D. Matocq

## Journal

Volcano Canyon  
1.4 miles E. of intersection with Foresthill Rd.  
Michigan Bluff on Michigan Bluff Rd. Placer Co.

21 July

39° 02' 27.3" 20° 45' 36.1" Went through the heart of the Gold Country yesterday, with a

quick stop at Sutters Mill in Coloma.

7/21 11<sup>35</sup> am.

Neotoma have been collected in Michigan Bluff but a long look in that area yielded no houses. We were successful, though, in finding houses just over the hill.

On Michigan Bluff road but on the West Facing slope prior to arriving at the town. We set traps in two areas separated by a tenth of a mile and camped near one of the sites.

A total of 30 traps yielded 5 animals. #352, 353, and 354 in the area where we camped and #355 and 356 just downhill .1

mile. #353 and 354 were caught in the same trap - likely mom and pup, but this female also had 3 embryos - 1 set of twins.

Also, female #355 was heavily lactating and also had 3 embryos. These animals were quite cinnamon colored, especially male #352



Journal

and female #355.

The vegetation in the area was dominated by Ponderosa pine, Sugar Pine, Quercus kelloggii, Cedar, Madrone and manzanita - the oak that they were predominantly using was probably Q. wislizenii although some looked like Tan Bark Oak - the understory was predominantly Blackberry. The ground was also covered in a deep layer of Pine needles and Q. kelloggii leaves. The soil, like around the Auburn area, is very red.



JournalHallsted

22 July

Came to the Hallsted area  
12:50 a.m. by way of highway 80 - 89-70.  
Stopped in the Cromberg area and  
looked everywhere for sign of  
Nectoma and found none - even  
down by the Feather River.  
Continued on to Hallsted area.  
Nectoma has been collected  
just past (West) of Hallsted  
on Rich Gulch Drive. Most of  
that area is now private property  
but we set out 10 traps and  
we'll what they yield - the  
area did not look promising  
even though the habitat looks  
perfect.

22 July

10<sup>30</sup> a.m.

Traps yielded no animals - a few  
were rolled several meters from  
where they were set, but no  
Woodrats in them. Now we move  
on to the Eagle Lake area. I suspect  
it will be difficult to find good  
habitat in that area as well.



Journal

Antelope Crk - intrct. Ant Cr. + Ponderosa Way  
South Antelope Campground Tehama

22 July

9:00 pm

After looking at distribution maps and MVZ collection records I decided not to trap the Eagle Lake area. Instead we went straight to the Payne Creek - Manton area that has been collected at before. The nearest public lands and campgrand is just East of Payne Creek down Ponderosa Way off Plum Creek road. South Antelope Campgrand - 8.5 miles from the intersection of Ponderosa + Plum Creek Rd. is where we will stay. The road leading here is about  $\frac{1}{2}$  a owned by a logging company - probably once was good habitat but has all been cut down - and the Forest Service part of the area is very nice. The vegetation is a mix of *Q. chrysolepis* and other scrubby oak, at least 2 species of scrubby *Geanthus*, *Pinus sabiniana*, *Arctostaphylos*, some red bud and, as always, poison oak. We set out 30 traps in



1998

M.D. Matacq

## Journal

3 areas along the road. The houses are few and far between but appear to be in the scrub oaks and not in the larger stately *Q. chryssolepis* - there's actually not even any sign of *Nectoma* in the larger trees.

Since I had no skins to prepare, we took time to swim in Antelope Creek - extremely cold water, the snow is not too far away. This evening we're having a beautiful thunderstorm, but only sprinkles of rain.

23 July  
10<sup>00</sup> am

PS:

10°15'37.6"

21°45'44.1"

2<sup>0</sup> am 7/23

The traps yielded 4 animals. Two adults side by side, #357 + 358. These were caught just uphill from the road about .2 miles from the campground towards Plum Creek Rd. Another .3 miles up the road we caught a mllip ♀ on the uphill side and finally another mllip. ♀



1998

W.D. Matacq

## Journal

2 miles further on the downhill side of the road. These animals have less cinnamon than streatori at previous sites.

Also, they had a phenomenal amount of ticks on them - at least 50-60 on each animal.

Most were very tiny nymphs and not embedded; but some were larger and embedded.

I think I'll be finding them on me for weeks to come!

24-25 July

Spent two nights in the Lake Oroville area but found no sign of woodrats. The first night was at the confluence of the Little North Fork and Middle Fork of the Feather River.

A beautiful area with common riparian vegetation but not too many oaks. Even found some newts in the river.

The next night we stayed in the Lake Oroville Park and got permission from R.A. Wisack (Ranger) to trap at the



Journaln  $39^{\circ}22'48.7''$  W  $123^{\circ}41'35.4''$ Redtail Campgrnd. Jackson State Forest

11 p.m.

Arrived yesterday (11 August) at Pepperwood Reserve around 5 p.m. This reserve is run by Greg deNevers and owned by the Cal. Academy of Sciences. It's located off Franz Valley road which is about 7 miles East of Santa Rosa- 101 on Mark West Springs Road. The habitat is a grassland-oak-chaparral mosaic. Some areas support Redwoods in canyons and there are a number of ephemeral ponds in the grasslands.

Shaun Kuchta in Dave Lakes lab has started a mark recapture study on the newts in several of these ponds.

We waited for Shaun to arrive at the Bechtel house until about 6<sup>00</sup> pm. He was returning from Humboldt where he and Sharon Marks are studying larval morphology of newts. Shaun brought



Chris and I to two locations for woodrat trapping. The number of houses is fairly low so we only found 8 good trap stations - two or three traps were set at each. The 3 of us returned to the Bechtel house for dinner and had great discussions about everything from great books to how to answer the question "what will your research do for the world?" - it was a late night!

This morning we went out and checked all the traps and caught two juvenile - subadult males at the southeast corner of Horse Hill. Both specimens (MDM 368 + 369) were very high in fleas and tiny ticks. MDM 368 was captured at a typical house at the base of a Quercus while 369 was captured in the crotch of a hollowed out oak. There were no houses in this tree



but there was a small group of sticks at the inner base of the trunk. Perhaps this small set of sticks was the entrance to more chambers in the trunk of the oak. Other than woodrats we saw pigs, deer, Sceloporus, Thamnophis, and Hyla. As we were packing up we had a visit from Greg and talked about woodrats - he enjoys telling visitors about them.

We left Pepperwood at noon and headed North on 101 to Willits then went West on 20 to Jackson State Forest. We camped to our favorite campsite in the Redtail Campground. We set traps on the hillside on the other side of Noyo creek from the campground.

This evening we prepared dinner and I prepared this morning's specimens.



Journal

13 August

Beth LakeHumboldt Co.10<sup>30</sup> pm

Got up this morning, had breakfast and checked traps. Out of 20 traps we found 2 females.

One was near the campground, the other on the opposite hillside of the creek from the campground.

Both were doubtably houses.

The one near the campground was, again, just a few sticks at the base of a redwoods, perhaps a more complex house was in the trunk or root system. The other animal was caught in an area under redwood and tanbark oak.

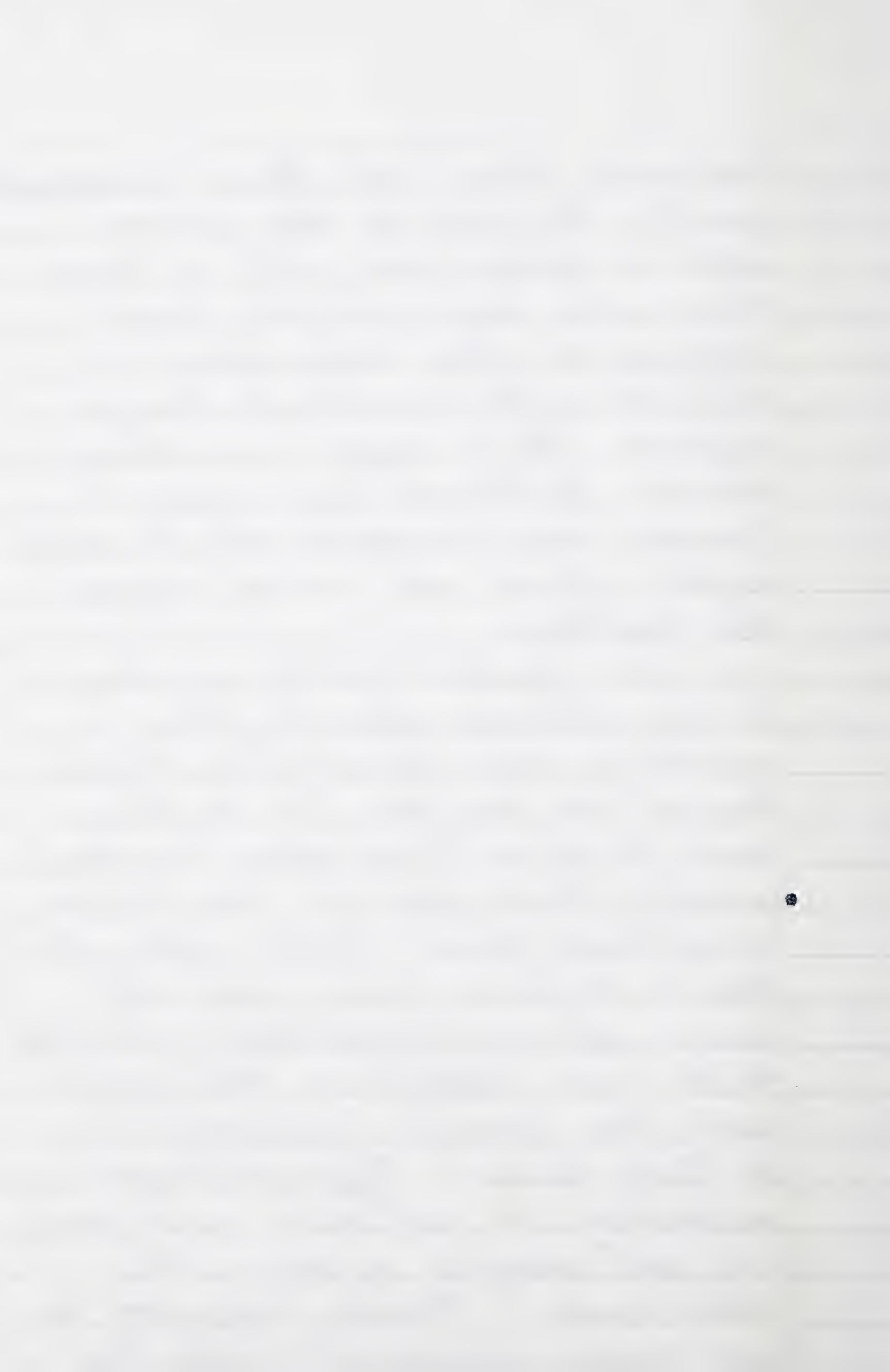
- Lithocarpus appears to be important to Neotoma especially when other oaks aren't available. The Michigan Bluff site was similar in its amount of tanbark oak, except there the acorns were just maturing.

This site is dominated by coast redwood, madrone, Douglas fir, and tan bark oak. The understory



had many ferns and other herbaceous plants. Adjacent to the stream was a narrow strip of willows. The area has recently been logged so the understory is strewn with a lot of large debris. This makes walking around difficult but also leaves many areas that would seem ideal as house bases for Neotoma.

We headed North on the 1, even through the fog the coastline was beautiful. From the 101 we took the 36 to the town of Mad River then headed towards Ruth Lake on the Lower Mad River road. Just north of the Ruth Lake dam we set traps along a riparian corridor that runs between the road and the creek leading out of Ruth Lake. Typical riparian vegetation of willows and some big leaf maple along with black oak. There appears to be some denning activity



but it looks like <sup>the</sup> area was fairly recently scoured. We set about 20 traps on each side of the creek - (one slippery walk across it!). The other habitat in the area didn't appear to support any woodrats. The only oak in the area appears to be black oak and this tall, deciduous species never seems to support Neotoma. Although collections have been made in the area, I found almost no sign of activity.

We stayed at Bailey Canyon campground which is right at the water's edge.



14 August  
10:30 pm

N 41° 2' 16.2" W 123° 37' 37.0"

Hoopa Valley Six Rivers Natl. Forest Humboldt Co.

This morning's trap check yielded no animals. Not too surprising given the lack of sign. They used to be in the area so I suppose with more effort we would find them, but onward, for the time being, perhaps I will return.

Taking the 101 to the 299 then North on the 96 to the town of Hoopa, we arrived at about 2<sup>00</sup> p.m. The search for woodrat houses was on! The most promising one was deep in a patch of blackberry. Hoopa Valley runs in a North-South direction with the Trinity River running down the middle of it. The site dominated by coast Redwood, Lithocarpus, and big leaf maple. Again, very little sign but the abundance of fallen logs and amassed debris may be masking the usual house building I'm



used to looking for. We set traps near our campsite in the blackberry bushes and along trails that went into the east-facing hillside off the small road that winds down to the campground from the 96. Again, this campground is adjacent to the south end of the town of Hoopa.

Once the traps were set out and the camp set up, we took some time to swim in the river. It was so hot and dry that we could barely open our eyes while walking! The cool river and large boulders we jumped off of were great fun.



1998

M.D. Matocq

## Journal

15 August

Six Rivers Natl. Forest  
Hoopa Valley

Humboldt Co.

The only Hedotoma was caught in the campground in a blackberry patch. There was a stick house well hidden there. We also trapped a beautiful Spilogale on the east facing slope of the Valley near the road leading down to Hoopa Valley Campground. By 11<sup>00</sup> am we had broken down camp and the specimen was prepared. We headed back to Arcata for a night off.

16 August

Arcata

Humboldt Co.

10<sup>00</sup> am

Spent the afternoon walking around a very quiet Arcata - school is out - eating great food and even taking a swim (really a run) in the Ocean.

Now we'll head back east on the 299 and North on the 96 to Seiad Valley.



17 August

10<sup>th</sup> am.

Seiad Valley

Siskiyou Co.

Arrived yesterday at about 2<sup>0</sup> pm. This Valley runs in an east-west direction with Klamath river running along it - also highway 96. The vegetation is typically riparian along the river with hillside vegetation of pine, cedar, and various tall and scrub oaks coming into the riparian zone at times. We set about 30 traps in 5 locations from about 1 mile west of the town of Seiad Valley to about 7 miles east of town along the river and up the hillsides. The houses in this area are again sparse with most of our traps being set at accumulations of sticks at the base of trees that are certainly more from flooded river debris than from woodrats. Some spots looked promising. We camped at O'Neil Creek campground.



Upon checking traps this morning we found two Neotoma. One adult male, udm 373 was caught along the river about 3.4 miles east of <sup>the town</sup> Seiad Valley. The trap of sticks looked only like river debris and this accumulation was at the base of a big leaf maple. The second animal, a nulliparous female, udm 374, was caught near a large house completely grown over by blackberry. Other animals attracted by our traps unfortunately didn't sit into them - so a bear did its delicate best to get the peanut which resulted in two completely smashed Tomahawks. The black bags around the Tomahawks were torn to shreds. Another trap was found several meters away with the bag torn off but not crushed and peanut butter



intact. We assume this trap was either first or last in the series of the bear's trap visits. It had either learned from its two previous experiences that the peanut butter wasn't worth the trouble or this was its first encounter and it just didn't deal with the trap at all. It was an area visited often by bears, perhaps this one, due to the presence of several scat samples - the blackberry bushes must be attractive.

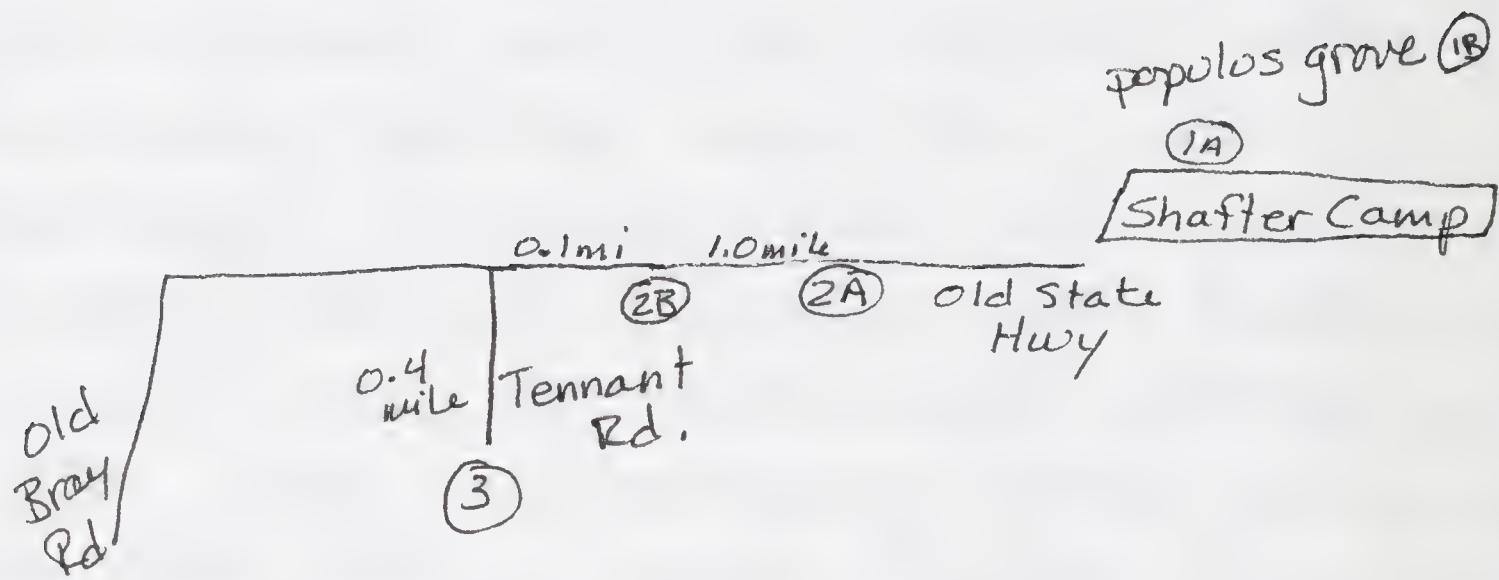
After preparing specimens and breaking down camp we will head east to Mt. Hebron.

11<sup>00</sup> pm ~~Mt. Hebron~~ <sup>Cedar Mtn.</sup> <sup>> between</sup> <sup>both</sup>

Siskiyou Co.

We arrived at about 2<sup>00</sup> pm. We came from Seiad Valley by the 96 east until it hit the 5. We went from the fairly mixed evergreen-coniferous forests of eastern + central northern California to the

## Cedar Mtn. Area



beginning of the Great Basin habitat. Going south on the 5 we immediately came into the Mt. Shasta area - there is still plenty of snow on the middle and upper reaches of the mountain.

We turned east on the A12 and then North on 97 to Ball Mtn. road then came to the Shafter campground on Old State Rd. There are several houses just southwest of the campground. These are some of the largest houses, 4-5 ft. tall, that I have seen. They are also particularly free-standing and like in Lone Pine, I see no Quercus anywhere nearby. We drove south on Old State Rd and set in various locations dominated by Pine and Juniper. These houses, too, are free standing and large - many pine cones are incorporated in each house. It appears that there are areas



where we find 4-5 houses within several meters of each other, then none for several 100 meters. Hopefully, we will have several animals in the morning.

All 36 traps that we have left have been set.

18 August  
11:00 am

After the coldest night we've had in months, I was thrilled to get 11 animals this morning. <sup>(neodamia)</sup> They appear to be using the Junipers predominantly, but they take advantage of rock outcrops and the tangle of fallen branches, and tree stumps.

The woodrats in this area don't seem to be heavier than elsewhere but substantially longer. Several of these animals had botfly larvae - one was pulled out from the chest of male MDM 380 and weighed 2 grams.



The glans of males also is quite different than what I have seen in R. fuscipes from the southern areas. The tip of the glans is usually 4-lobed but here it appears to have a single, thin point - almost seems amazing to think that this is intraspecific variation.

Also, the juveniles and subadults here have extremely black feet - both the pads and skin of the foot is black. However, the adults have relatively pale underfeet. The darkness of the fur comes down the ankle onto the foot but not in a 'splash' of grey across the foot.

This type of habitat seems ideal for studying woodrats.

I have wanted to pursue an ecological mating/social system variation study to compare to my Hastings population and this area seems ideal. The abundance



of animals is high, the habitat is very easily worked - it seems ideal.

This afternoon we will continue east to the town of Alturas in Modoc County.

We will spend the next two nights with my friend Allison Sanger who is currently a botanist for the Forest Service.

19 August Alturas

Modoc Co.

2:15 a.m. We arrived in the town of Likely, about 19 miles south of Alturas, at 5<sup>00</sup> pm. The habitat is predominantly Pinus<sup>(yellow pine)</sup> and Juniper, very similar to the habitat in Mt. Hebron.

We set all our traps in two areas, each about 5-6 miles west and east of the town of Likely off the 395. Again, the houses are quite free standing although a few were observed in trees.



There was a short evening rain shower as we were finishing to set.

We arrived at Allison's house at about 8<sup>00</sup>pm. Her roomates and ~~hers~~ had prepared a great dinner so we relaxed and caught up.

I finished skinning and preparing this morning's specimens after everyone had gone to bed.

12<sup>00</sup>pm. After a few hours of sleep we left to check traps.

A total of 17 woodrats! 11 at the first site and 6 at the second. The largest of the adults appear more grey than some of the younger adults.

Some adults, males and females, are much more cinnamon on the sides than others.

After a nice lunch with Allison I spent the afternoon preparing specimens.



20 August

10<sup>00</sup> pm

5 miles SE of, Pit River Campgrnd.  
Fall River Mills

Shasta Co.

Left Alturas today at about 10<sup>00</sup> am after getting my leaking tire fixed, and re-supplying for the final leg of our trip.

We headed south east on the 299 to just North of the town of Burney. We are staying at the BLM's Pit River campgrnd.

We set traps at various locations within a mile radius of the campground.

Outside of the immediate riparian area near the river, the habitat is dominated by black oak and grey pine with a Bikes and poison oak under story - even some mountain mahogany, also some Juniper + Yellow Pine.

We enjoyed a great dinner of halibut. Allison's mother who was also visiting Alturas gave us the halibut that some friends had caught up near the Puget Sound - delicious!



21 August  
11<sup>th</sup> am

Another very cold night but the Nectoma were out. We had 10 woodrats this morning - only one subadult, nulliparous female all the rest were full grown adults. All the animals were found in several areas just east of the campgrand. The habitat right along the river would have generally been a place to find nests but it was so heavily scorched that little sign was found there.

The houses here were only 2-3 feet tall but sometimes larger and even in trees. Many were well within the Ribes bushes - in terms of protective structure these Ribes bushes take the place of poison oak bushes elsewhere. The P.O. here was mostly herbaceous and grand running vines. Stick houses were also built on top of the many lava rocks - boulders of the area.

We are now leaving for the



Beegum area: we'll go to Redding on the 299 and to Beegum on the A16. We've stopped in the lava fields just east of Cassel to look for herps - we should be at our next site early in the afternoon.

22 August Platina

Set traps in two areas. The first was at the intersection of Stuart Gap Rd. and SR 36. Overstory here was black oak and yellow with an understory of manzanita and mountain mahogany. The second area was .8 mi. west of Stuart Gap Rd on SR 36.

The first area was quite open and we found only 2 animals while the second area was very thick scrub and the houses were very large. There was sign of bear here but none of the



traps were damaged.

Hunting season has begun and we were strongly warned by the ranger that this is a dangerous time to be out. Luckily we'll only be out one more night!

We're heading further south to our last stop for the summer and the last stop on the east side of the North Coast range, near Stony Ford.

9.5 mi. west of Stony Ford off Foothills Springs Rd.

Stony Ford south fork of Stony Creek Colusa Co.

Last stop for the summer.

Trapped along Foothills Springs Rd. Stayed at campground near the creek. Very steep terrain near here and dry. Most people seem to come to do a lot of ATV riding - pretty rowdy crowd! Maybe because it's the end of the summer. Hare small but quite abundant in steep drainages with oaks.

23 August



1999

M. Matocq

24 February

San Justo Reservoir

San Benito, Co.

Left Hastings with Alexandra  
Minn (Field assistant for 99 field season)  
to collect outside of Hollister.

Met Cathy Johnson who works  
with Pat Kelly and Dan Williams  
at the 'San Joaquin endangered  
species recovery program'.

We headed out of Hollister  
and along Union Rd. towards  
the reservoir - 1.9 mi. off  
Union Rd into the reservoir  
property is where we trapped.

It's a small maybe 50m.  
stretch of riparian habitat.

There are 2-3 oak trees,  
and much rose and poison  
oak along the cut banks.

This small drainage comes  
off the southwest end of  
the reservoir. We set Tomahawks  
throughout the area and  
Cathy set larger traps for  
Sylvilagus. We checked the  
trap in the evening once;  
there were no animals



but traps needed to be reopened.  
In the morning there were  
3 woodrats in our Tomahawks.  
2 had been previously ear-tagged  
and likely the ear tissues of  
these sent to me previously.  
Will be important to examine  
these specimens thoroughly as  
they are genetically quite  
distinct, based on mitochondrial  
DNA.



Journal

5 Jan.

Left Berkeley this morning and met Amy Jess in King City prior to heading to the Camp Roberts Military Reservation on the border of Monterey and San Luis Obispo Counties. Two distinct mitochondrial and morphological groups approach one another in this area so we are trapping throughout the area to examine how correlated these characters are on a finer scale.

We set out Tomahawk traps baited with peanut butter and oats in two locations on the military reservation (maps following page). We will spend tonight and tomorrow night on the base and hopefully trap in a total of three localities. Tonight we set about 30 traps at Sherwood Forest and 35 at Deer Trail.



2000

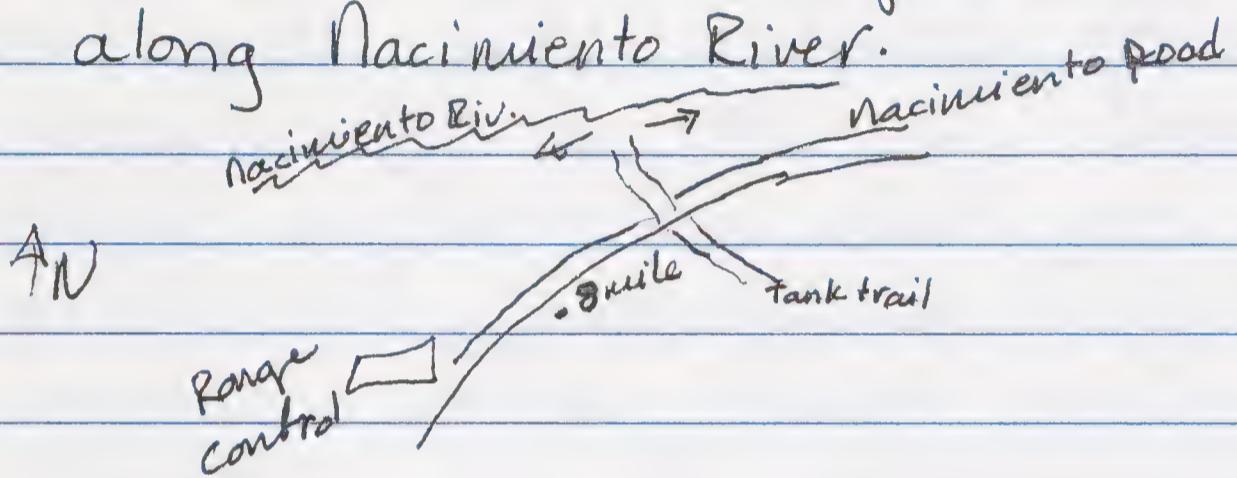
U.D. Matocq

## Journal

5 Jan cont'd

Sherwood Forest site:

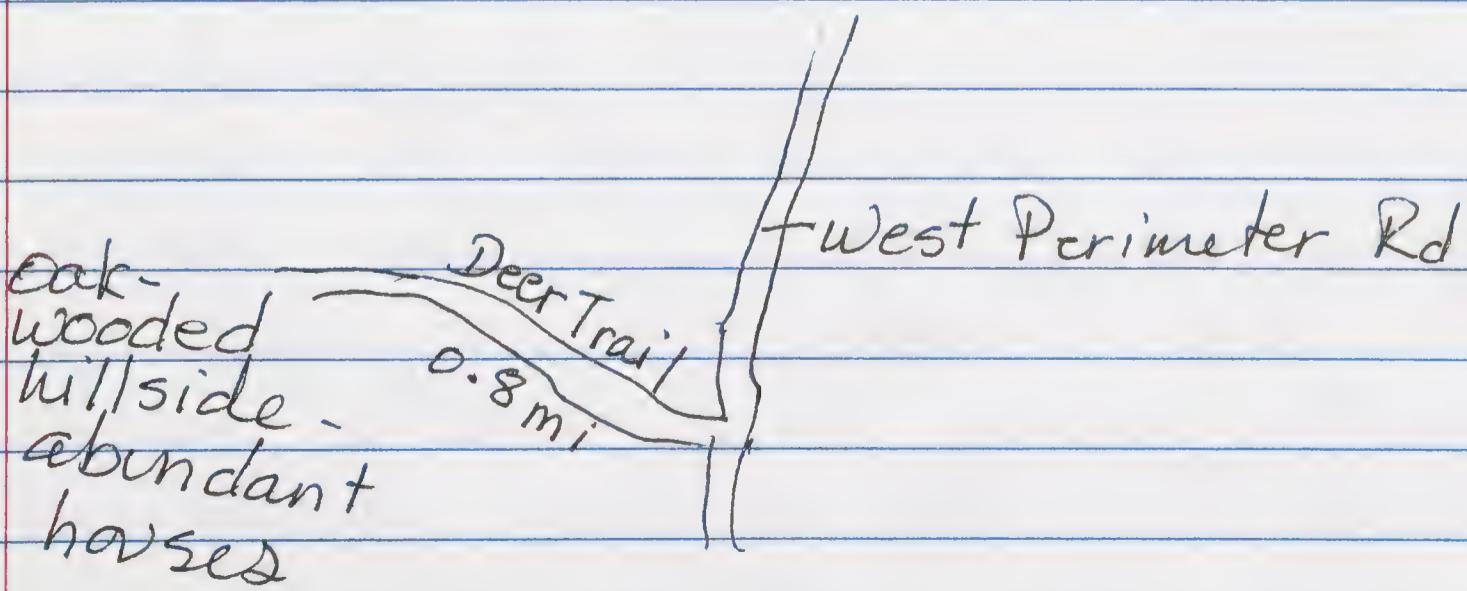
Camp Roberts, Monterey-San Luis Obisp Co. line  
0.8 miles NE of Range Control building  
along Nacimiento River.



Vegetation on eastern side of the dried river bed had several houses where woodrats were caught.

Deer Trail site:

Southeastern corner of  
Camp Roberts, San Luis Ob. Co.





6 Jan.

It was a very cold night but we had a fair amount of success. We had 10 animals from the Deer Trail site so we moved those traps to a third locality this afternoon, but we will trap at Sherwood Forest again. The third site (Estrella 1) is southeast of San Miguel, 2.1 miles on Estrella Rd. from River Rd. We spoke to the landowners to have access to the river bed itself - very nice folks with lots of questions about woodrats. Houses were fairly abundant among the oaks and willows at the edge of the dried Estrella River bed. I expect to trap N. fuscipes bullatia at this site. We also drove further along the Estrella to the junction with 46 to lay out two more localities that Amy will



return to in the coming weeks.

7 Jan. We had good luck again and have a total of 8 animals from Sherwood Forest and another 11 from the Estrella 1 site. The Estrella site was quite isolated - except for a very thin margin of remaining riparian habitat (truly 1 or 2 trees thick at times with large gaps) there is nothing but farmland in these areas. Difficult to understand how these populations are hanging on.

We left the reservation seemingly on time as there were several airdrops of huge cargo into the middle of the Sherwood Forest open area - they must be preparing for training.



2000

M.D. Matocq

## Journal

Hastings Reservation Monterey Co.

18 December

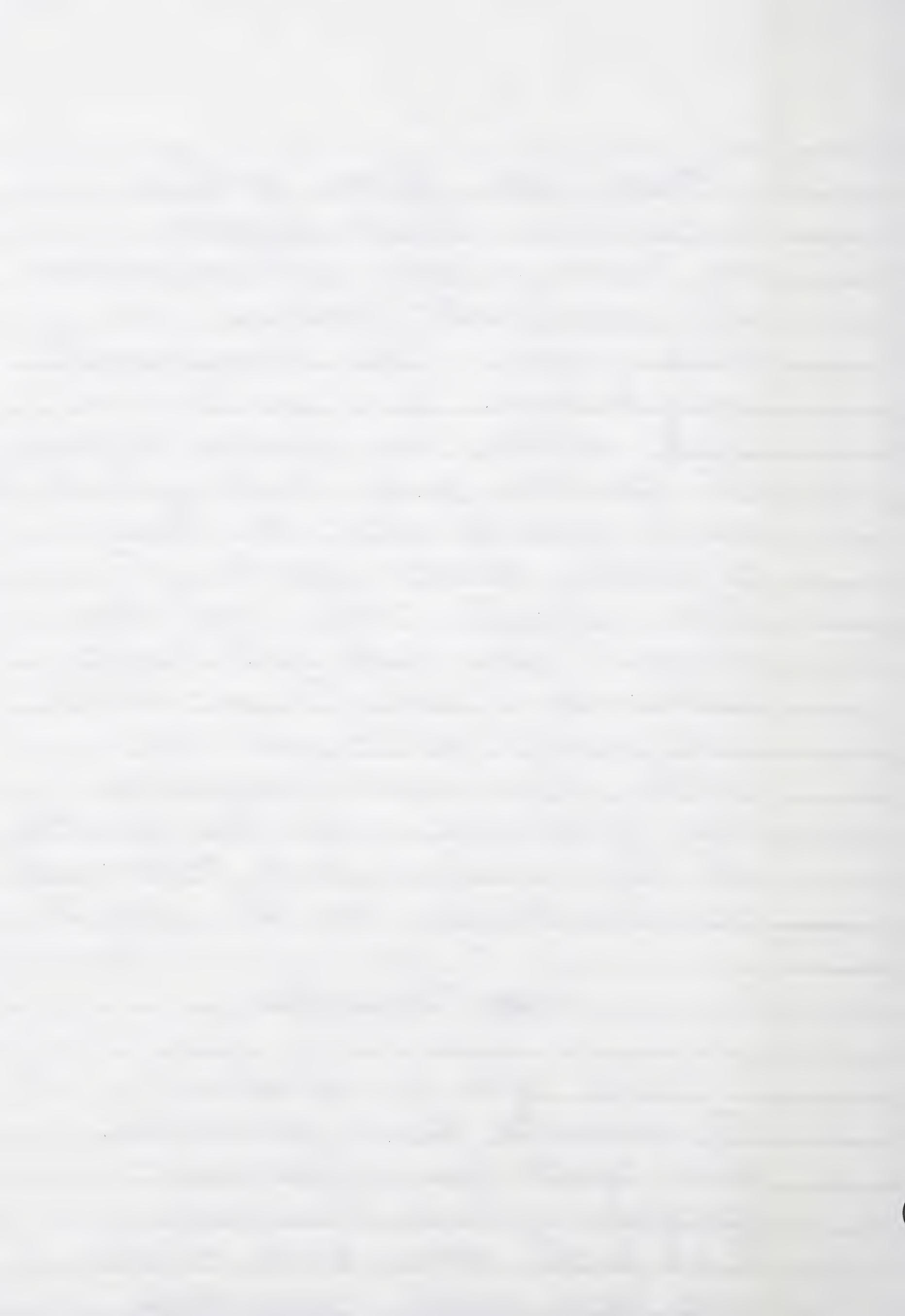
Left Berkeley at about 10am with Yair Chaver headed for Carmel Valley to collect N. f. luciana for ongoing population studies. We will work for a few nights on the Santa Lucia Preserve which is located near the mouth of Carmel Valley. Jeff Froke oversees this Preserve which is partly slated for housing development. We arrived at the Preserve at 1<sup>30</sup> pm and met Susan Whitford who showed us this site. She also gave me a specimen of luciana salvaged from the property in March (MSM 697). We set out 70 Tomahawk traps at the "Site 1" development area. It's 2.5 miles into the Preserve on Rancho San Carlos Rd. from where RSC rd. intersects with Carmel Valley Rd.



There are three or four localities that appear to have a high concentration of woodrat houses in this area. The dominant vegetation is coast live oak with an understory of poison oak (lots of it!) and scrub oak on the slightly drier parts of the uphill side of the road. We set out traps between 2 and 5 pm - until we could no longer see well. We went shopping for food etc. at the mouth of the Valley and returned to Hastings for the night.

19~~20~~ December

We got a total of 7 animals this morning. We spent the afternoon preparing them Hastings. It's been some time since we have made specimens



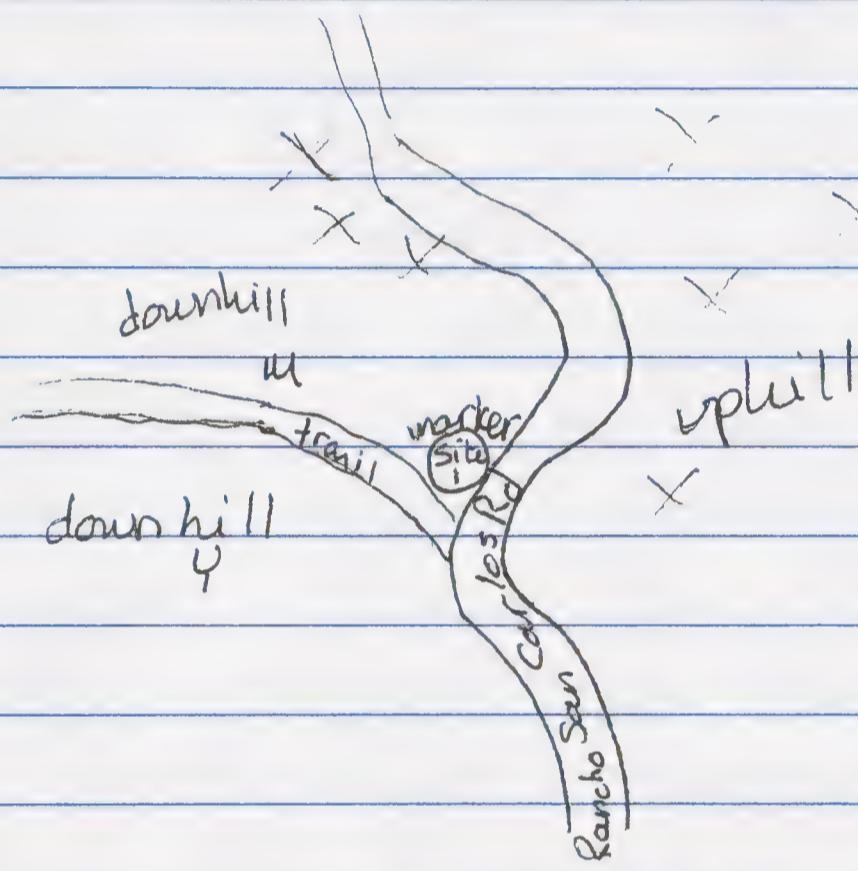
for the MVR so we were quite slow and only finished putting up the skins after we returned from setting traps this afternoon.

We began setting traps again at 3pm to each set out another 20 and then re-open the previous 70. I expanded further up the hillside along the right side of the road and Fair continued to expand downhill.

### 20 December

Of the 110 traps set, we got a total of 13 animals last night. Again we spent the afternoon preparing and then returned to the site to set out yet another 20 traps. The weather has been incredibly mild and the number of pregnant females indicates that





2.5 miles to  
Carmel Valley Road



This is an exceptionally good year.

21 December

We trapped another 18 woodrats on our third night exceeding the number B had hoped to get ( $\approx 30$ ). Therefore, we broke down the site and packed up to get back to Hastings, finish preparing the specimens. We finished everything and left Hastings at about  $4^{\circ}$  pm. We hit some rain and much traffic on the way home. In the process of unloading my gear into Bob Jones' office, I managed to lock my keys in my car - what a fiasco - time for a good holiday break.

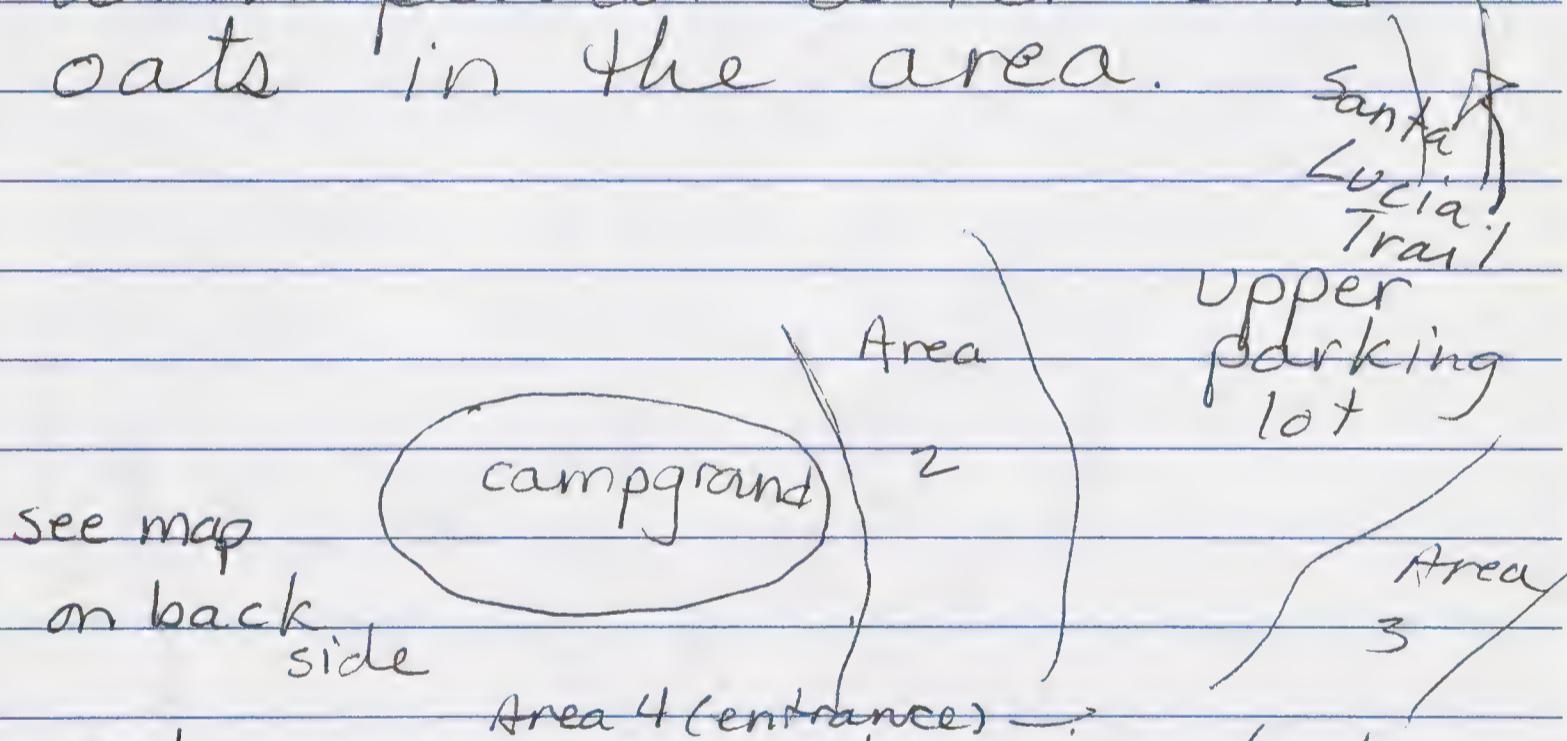


2000

W.D. Matog

## Journal

Dec. 28<sup>th</sup> Hastings Reservation Monterey Co.  
Left Berkeley at 10<sup>00</sup> am  
and arrived in Arroyo Center  
at about 2 pm by way of  
Greenfield. Our base was  
the Arroyo Seco Campground  
and Gair and I set  
out 50 Tomahawks baited  
with peanut butter and  
oats in the area.



The area is dominated  
by coast live oak, valley  
oak, manzanita, toyon,  
and of course poison  
oak. The manzanita is  
blooming which makes  
it look like there's a  
thin layer of snow  
on the ground. The  
toyon is fruiting - beautiful



41000 Autryu doo raw  
Greenfield, CA 93927  
831-674-5726

R Santa  
Lucia  
Road Closed Trail (Area 1)

GORGE PARKING ON

Area 3

Area Manager

Area 2

One Way

MODERN CAMPGROUND

\$16.00 per night  
Maximum of 8 persons per site  
Extra vehicle \$5.00 per night  
Maximum of 2 vehicles per site

33 SITES AVAILABLE

Group Camping  
Area

FISHING LAKE ONLY. NO SWIMMING  
NO SWIMMING ON  
FISHING LAKE ONLY

Area H

PARKING

One Way

Area 5

92



red Christmas berries. The weather continues to be unseasonably hot and there has been little or no rain. We trapped in three major areas, along the Santa Lucia trail, around the upper parking lot and between Old's upper lot and the campground. The area is quite steep and the houses are less dense than at the previous Santa Lucia Preserve site. Many houses are tucked in small rock outcrops - I wonder if we won't trap some *N. lepida*.

Dec 29

Checked traps this morning and got 6 males and 3 females. It appears that we may have lost some animals to a predator as a couple traps had the back doors



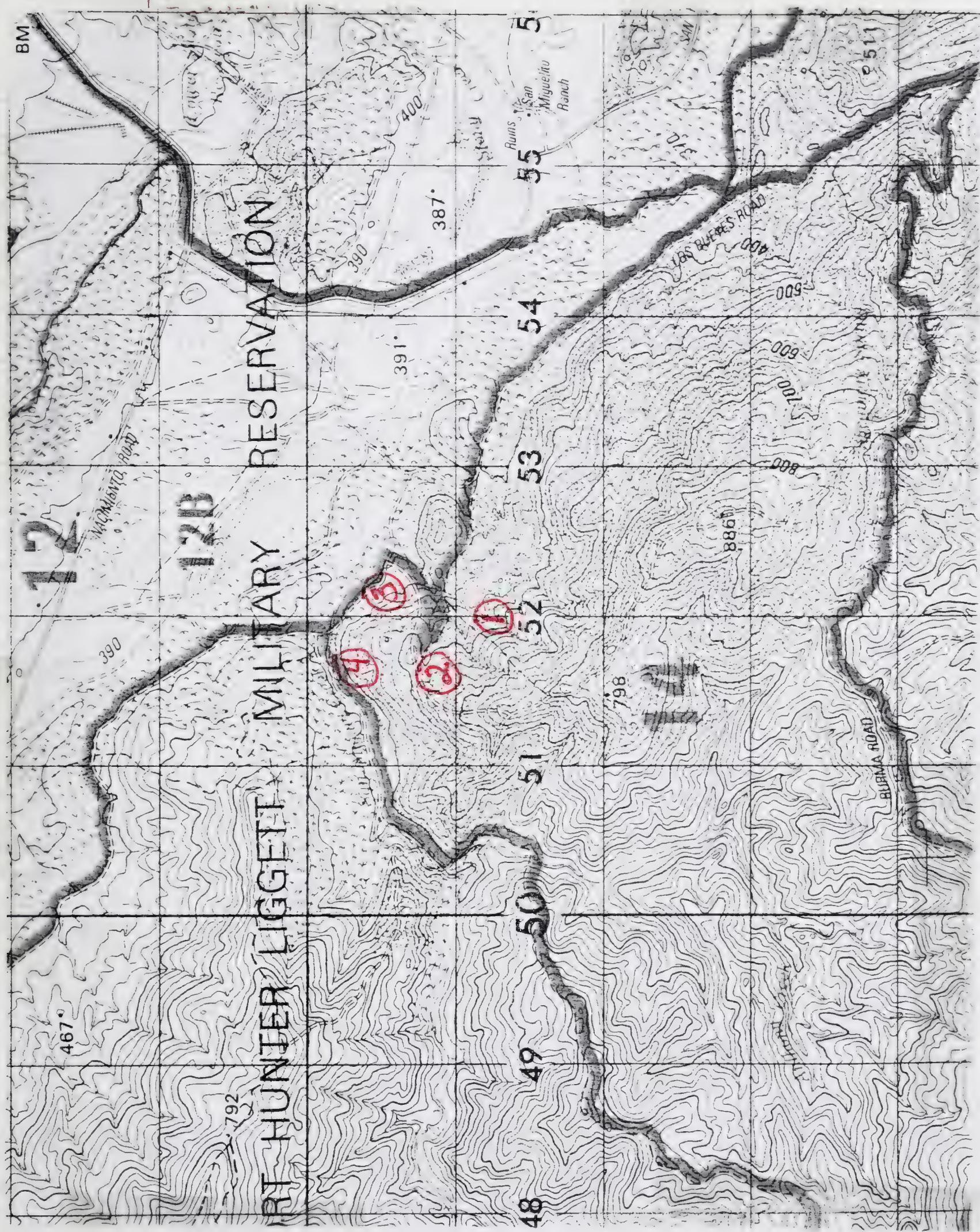
pulled out. We prepared specimens at Hastings during the afternoon then returned to the site at about 2pm to set out more traps. We set an additional 40 traps to the east of the campground around the two lakes - 20 traps near each lake. This area, too, was quite steep but the houses a bit more dense as the understory was more dense than the west end of the camp.

Dec 30 We arrived this morning to a pleasant surprise of 21 woodrats! My aim of 30 from each site was met in only two nights! Again, we lost a couple animals to predators - including one trap (mz125). It was lost near the edge of



the ravine near the upper parking lot - it may have gone over the edge. We spent the rest of the late morning pulling the traps and getting back to Hastings. After a long day and night of preparing, we will head back to Berkeley in the morning. The next, and final, site is on Fort Hunter Liggett and we cannot begin work there until Liz Clark, the biologist, returns from her Christmas break. We will celebrate the new millennium with our families, then, and not with the woodrats as I had thought.







Hastings Reservation Maveray Co.  
January 3

Left Berkeley at  $9:00$  am and arrived at Fort Hunter Liggett at  $12:30$ . I had been communicating with Liz Clark but was met by another biologist in the Environmental Office, Mitch. After explaining the type of habitat we were looking for; oaks with thick underbrush, we headed west into hills. Along the eastern foothills of the Santa Lucias, we found a good number of houses and set out from the car on foot. With this unusual weather - a dry  $80^{\circ}$  - the usual rain gear attire for avoidance of poison oak was especially difficult to bear.

San Miguelito Creek is running well and there are numerous



houses on the adjacent north-facing slope. This is the driest of the sites we worked in, of course.

The coast live oaks are low in stature with gray pines throughout. Patches of oaks + other shrubs are separated by dry, open fields. The woodrat houses are quite dense in the flatter areas near the road but, as always, less dense on the steeper hillsides. We laid out a total of 80 traps so hopefully we will have good success, although the moon is nearly half full.

After checking out with the military police we made the trek back to Hastings. On the way back, just after getting off the 16 towards Hastings and away from Arroyo Seco we saw an incredible



shooting star. Amazingly bright and very long and slow - it seemed to be right in the valley with us. We had dinner with Maria Soares who has returned to work on voles at Hastings. She is interested in how differing resource abundance influences mating systems.

January 4

They never cease to amaze. With nearly 50% trap success we got all the woodrats needed for this study in a single trap night. While checking traps, my friend from Cal Poly SLO, Jim Kilber, stopped by. Now a biologist on Fort Hunter Liggett he told us that he commonly sees Tule Elk, coyotes, bobcats, Golden & Bald eagles and they actively manage the



wood duck population by providing nest boxes. Hopefully, this natural area will continue to be maintained as such. After spending the better half of the morning pulling traps we checked out at Range Control and Environmental Office. This time Liz was there and was also impressed at our trap success. We returned to Hastings and had a late lunch with Joey Haydock (visiting from Spokane) then spent the rest of the evening preparing specimens.

January 5

We finished preparing at about 2pm after having taken a brunch break with the gang at Joey's. It will be some time before I see Hastings again - I'll return as often as I can.

















